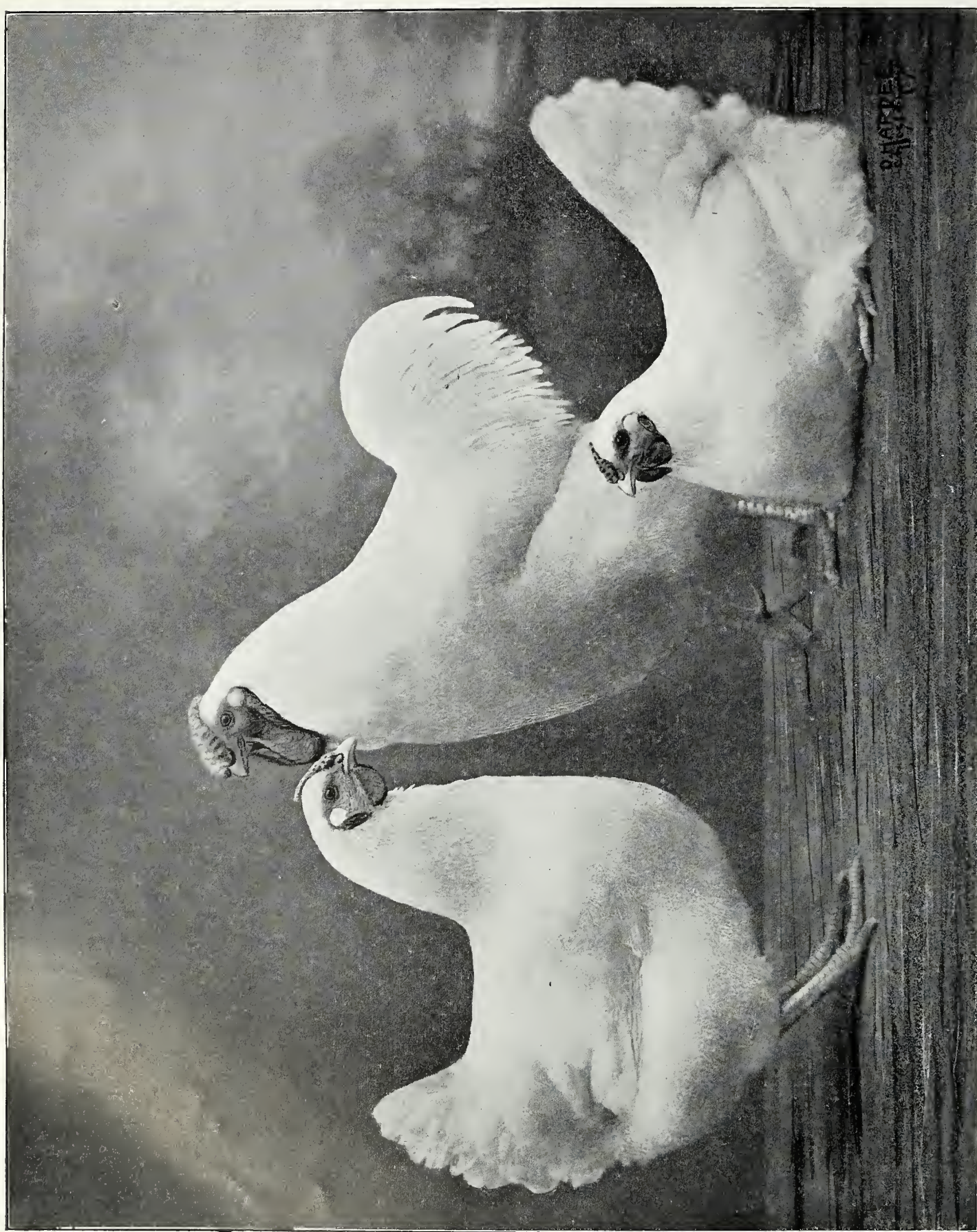


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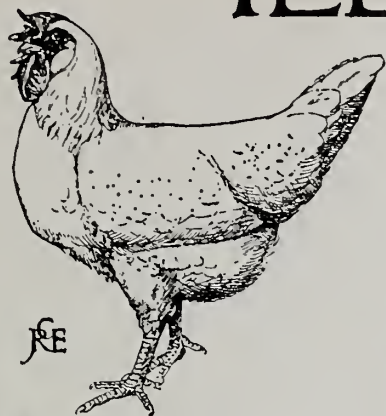


**A Trio of White Wyandottes.**

BRED BY, AND THE PROPERTY OF, MR. ART. C. GILBERT, SWANLEY POULTRY FARM.



# THE ILLUSTRATED POULTRY RECORD



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## DIARY OF THE MONTH.

### EDITORIAL NOTICES.

Telegrams: "CHICKENDOM." Telephone: 1999 P.O. CITY.

ENTERED AT STATIONERS' HALL.

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### The Fox Question.

Information which has reached us from an independent source, but which we believe is reliable, would lead to the conclusion that the Masters of Foxhounds' Association has not responded at all adequately to the representations placed before its committee by the delegates from the three great Poultry Societies. A further Conference has been held, but at the time of writing no official report has reached us. Some slight concessions have, we understand, been suggested, but these are insufficient to meet the case. The moderate claims made by the Poultry delegates were proof of the earnest desire to find a *modus vivendi* without interfering with fox-hunting as a sport, and should have commanded immediate and complete acceptance. It will be very serious indeed if poultry-keepers all over the country are informed that, owing to the attitude adopted by the Hunts, their just and reasonable claims are refused. One essential factor to any agreement is that all the Hunts shall be brought into line and that uniformity shall be secured. We hope that the further Conference referred to may yet lead to an arrangement between the two interests involved, but it is necessary to recognise that poultrymen are determined to obtain the justice which has hitherto been largely denied.

### Awarding Special Prizes.

Special prizes are all very well in their way. They may do good, or they may not; but more often than otherwise they are a source of worry to the judge. At Paisley Show, held last month, two silver cups (or £5) were offered as special prizes, but apparently the rules governing them were not fully understood. The one was "for the best cock



exhibited at the show most suitable for producing fowls for laying and table purposes"; the other "for the best hen exhibited at the show most suitable for table and egg-producing purposes." The former was awarded to a Light Brahma cock, which won first prize in a class for Brahmas or Cochins, and the latter went to one of two Dorking hens, shown in a class for breeding-pen (cock and two hens), mated to produce utility fowls, the cock in this pen being an Old English Game. A friend who attended the event tells us that the awarding of the hen cup caused much dissatisfaction. We fear he was under the impression that the cups were of the usual kind for the best cock and hen respectively. At the show there were classes for Orpingtons, Plymouth Rocks, Scotch Greys, and Wyandottes, not to give the full list of the general purpose breeds for which provision was made. And it seems passing strange that the Brahma and the Dorking should head the list of breeds combining laying and table qualities. At best, in this country, the Brahma does not rank as a layer, and it certainly falls short as a first-class table-fowl. And, granted the table qualities of the Dorking, what of its laying powers? 'Tis as well, perhaps, that all of us cannot see alike.

### Errors in Schedules.

We have at times had occasion to draw attention to little errors in schedules of poultry shows that may make all the difference, and which often lead to much misunderstanding and a great amount of trouble and correspondence. In the schedule issued for Dalry (Galloway) Show appears the following: "Unless six entries in Section 1 (Poultry), first prize will be withheld." Since Section 1 (Poultry) consists of thirty-nine classes, we think it is pretty safe to say that there will be six entries in it! Of course, some readers may think it means "six entries a class." But does it? It may mean an average of six a class, in which case it might make a lot of difference. Secretaries often complain that they cannot get entries; in some cases it may be due to a little carelessness in arranging the schedule.

### Fanciers' Breeding Results.

Judging by the classes for young birds that have been seen at some of the summer shows, there is a very satisfactory crop of early chickens this season, in spite of weather conditions, which many breeders regarded as fatal to their operations. Skill and care, however, can achieve much, and in this particular case they have gone far to produce one of the

best crops of chickens that have been seen in recent years. Many varieties have been represented, but for numbers and quality nothing can touch the Orpingtons, and a remarkable fact is that whilst this, one of the largest breeds of poultry, is to be met with in such numbers and such a forward state of development, representatives of the lighter breeds have been very scarce. The explanation is no doubt to be found in the fact that fanciers of the smaller breeds do not commence breeding so early in the season, though, in view of the large number of shows that nowadays provide classes for chickens, there would appear to be ample encouragement for earlier operations. The early shows are not, as a rule, however, a reliable guide to the season's breeding operations, though in this case there is reason to believe that a good start presages a satisfactory ending. Usually the best chickens are found among the later broods, and the early show birds enjoy but a brief career during the summer months. From many of the largest yards come reports that this is again likely to be the case. January and February were not propitious months for chickens, and though in special circumstances a number of good specimens have been reared, we shall, in all probability, find the bulk of the youngsters, and the best of them, coming out at the big autumn shows.

### Elementary Education in Poultry-Keeping.

A poultry-keeper living in a small country town, desiring to employ a boy for an hour or two in the evenings, applied to the headmaster of the local Council schools for a lad who knew a little about poultry. The master had to confess that there was not such a boy in the school. Many of the scholars, he added, were not quite sure how many legs a fowl had, and those whose parents kept a few hens were totally unable to offer a sensible theory as to their management. It is, unfortunately, impossible to adopt everywhere the plan followed a few years ago by a Hampshire schoolmaster. He had several pens of poultry on spare ground near the school, and these were looked after almost entirely by the older scholars, to whom practical instruction was given in all details concerning the management of fowls. The result appears to have been entirely satisfactory, though we fear little notice was taken of it by those responsible for the education of the young. The children took a keen interest in their work, several boys obtained remunerative employment on adjacent poultry establishments, and nearly every cottager in the parish took to keeping a few hens. Practical education of this kind for the children of the



working-classes is admirable, and it is to be hoped the time will come when training in gardening, poultry-keeping, and other practical work will take a prominent place in the curriculum of the country elementary school.

### What the Hen Has Done.

Modesty is, perhaps, a praiseworthy weakness. But poultrymen have always been too modest. They have not given themselves or their industry credit for what has been accomplished. That much has been achieved by the British hen cannot be questioned. Never

hen as a money-earning factor is recognised. Congressman Dawson, from Iowa, where farm poultry-keeping has lately grown by leaps and bounds, recently said in the House of Representatives at Washington:

Poets may sing of the glory of the eagle and artists may paint the beauties of birds of plumage, but the modest American hen is entitled to a tribute for her industry, her usefulness, and her productivity. The American hen can produce wealth equal to the capital stock of all the banks of the New York Clearing House in three months and have a week to spare. In less than sixty days she can equal



A GENERAL VIEW ON MR. WALSH'S DUCK FARM IN LANCASHIRE.

[Copyright.]

During last season over 35,000 ducklings were hatched upon this farm of twenty-five acres. Mr. Walsh is a great believer in economy so far as houses and appliances are concerned, and everything is of a rigidly practical character, plain and simple almost to a fault. The Broadwater Duck Farm disproves the assertion recently made in one of our leading weekly journals that "no duck farm has been carried on profitably for more than two years."

can we forget an old farmer some years ago, who, with tears in his eyes, told the story of how his wife had managed, during the time of stress and disaster, to keep the home together by means of the hen-money. That much was good, but we should aim at making our fowls help to make more prosperous every section of the community. In America the value of the

the total production of all the gold mines of the United States. The United States proudly boasts of its enormous production of pig-iron, by far the greatest of any country in the world, and yet the American hen produces as much in six months as all the iron mines in the country in a year.

We wish some of our M.P.'s would talk like that.



### Twelve Months' Laying Competition.

There is much to be said for the suggested holding of a twelve months' laying competition under the management of one of the Agricultural Colleges, and it will be interesting to learn how many of these educational institutions send a favourable reply to the invitation of the hon. secretary of the Utility Poultry Club. As a matter of fact, there does not appear to be any reason why the tests should be limited to one experimental farm, and if the response is sufficient to make a suitable selection possible, it would certainly add to the interest and teaching value to arrange a triple event—in the South, the Midlands or North, and Scotland. If a Welsh contest could be added to the series, so much the better. The work initiated by the Utility Poultry Club is one in which the teaching bodies might well interest themselves in a directly practical manner, with benefit to those they represent as well as those receiving their instruction. Some modification of regulations would necessarily be required to meet the exigencies of such a situation as an Agricultural College Farm, but the advantages of such an object-lesson to the institutions concerned would be incalculable; whilst the expert management and trained routine of an experimental farm should be satisfactory to the owners of the birds. It is to be hoped that the invitation will result in an embarrassment of offers to undertake a competition.

### "Owners' Risk Rates."

Presumably the adoption by the English and Scottish Railway Companies of the recommendations made by the Railway Conference—constituted by the Board of Trade to review questions between the companies and traders and the general public—is, in some sort, intended to be regarded as a concessive act. These amendments refer to goods carried in merchandise trains and perishable merchandise carried in passenger trains; and in each case admission is made of some liability in the case of non-delivery, pilfering, misdelivery, or delay. The clause which will give the least satisfaction is one which very nearly concerns the consigner of dead poultry, and is that dealing with the all-important question of delay in the case of goods sent by passenger train. The risk of deterioration during transit is well known to marketers of dead fowls, and, despite the utmost care in preparation and packing, the losses from this cause in summer are by no means inconsiderable. Yet it appears that liability is not admitted for a delay of less than forty-eight hours, the clause in question reading as follows: "Delay in transit exceeding

forty-eight hours of any package or consignment, fully and properly addressed, as a result of which the value of the goods is deteriorated to the extent of three-fourths, if such deterioration is pointed out to a servant of the Company on or before delivery. Provided that in such case the Company's liability shall not exceed one-half the diminution in value of the goods." Relative to the carriage of milk in cans, which appears to be the only exception to the above rule covering *perishable* merchandise, the "delay" clause fixes the period at twenty-four hours!

### Cold-Storage Produce.

Over-statement is never a paying proposition in the long run. When, therefore, we read that "the cold-storage egg is better than any fresh egg ever laid," it is evident that those responsible for such a pronouncement are in a somewhat tight corner, from which they hope to escape by bluff. That, however, appears to have been stated by defenders of the cold-storage interests in America, where this system is very general indeed, partly owing to the huge size of the country and the need for transporting food products over long distances. Fortunately, with us the conditions are very different, and local demand in many cases dispenses with the need for cold-storage on a sufficient scale to make the business profitable. Whilst it is true that for short periods cold-storage is of the greatest value, equalising supplies and preventing slumps in prices, such does not in any way alter the fact that when eggs and chickens are held under low temperatures for a prolonged period, changes take place which, in some cases, appear to be detrimental to food value. The problem is sufficiently complex without the publication of claims which everyone knows cannot be sustained.

### Losses by Rats.

Two years ago, when the Incorporated Society for the Destruction of Vermin was established, it appeared as if a determined attempt was about to be made in this country, as is the case elsewhere, to deal with the plague of rats, but we have heard nothing of it for some time, and conclude that the Society has died from want of nutrition in the shape of subscriptions, or is dormant. That there is need for some such effort is unquestionable, as the loss by rats is probably several times as great as that by foxes and other large animals. One of the Northern Chambers of Agriculture has had the question before it, and a statement was made that the annual loss in the United Kingdom is £15,000,000, which means that it



would pay for half a dozen Dreadnoughts, or for Old-Age Pensions nearly twice over. Nor does that estimate appear to be excessive. Poultry-keepers suffer heavily from the depredations of these rodents, both in the destruction of birds and the waste of food, and the more intensive the production, the greater will be the number of rats unless some universal and complete measure is taken for their destruction.

### July Shows.

Among the most important poultry shows to be held this month—almost sixty are announced up to the time of going to press with these notes—may be mentioned the following: The North-West of Ireland Agricultural Society,

George H. Procter is the secretary; the summer show of the Royal Northern Agricultural Society at Kitty-Brewster, Aberdeen, on the 14th, where liberal classification is given for Dorkings, Hamburgs, Leghorns, Orpingtons, Wyandottes, and ducks; the Northumberland County at Morpeth on the same day; the Sussex County at Eastbourne on the 14th and 15th; the Lincolnshire Agricultural Society at Spalding on the same days, this show generally being a good one for water-fowl; the "Highland" at Dumfries from the 19th to the 22nd, where third prizes are not awarded in classes with less than six entries; Blackpool, on the 20th, 21st, and 22nd; the Waterford Agricultural on the 21st and 22nd; and on



ON THE RANCOCAS POULTRY FARM, NEW JERSEY.

[Copyright.]

During 1908 rather more than 362,000 eggs were produced on this farm, while last year the total was considerably over half a million. The hens, which are all White Leghorns, produced an average of 144 eggs per head per annum in 1908, and 133 in 1909.

in its permanent show grounds at Lecky Road, Londonderry, on the 5th and 6th inst., in connection with which there will be poultry-plucking and trussing competitions; Redruth, Cornwall, 6th and 7th; the Derby County at Osmaston Park, Derby, 13th and 14th, Orpingtons and Wyandottes being the chief breeds catered for; the Durham County at Bishop Auckland on the 13th, of which Mr.

the same days, unfortunately, the Staffordshire Agricultural at Leek and the "South-Eastern Counties" at Tunbridge Wells. Other shows for the month are the Great Yorkshire event Roundhay, Leeds, from the 26th to the 28th; the Leicester County on the 27th and 28th; the Herts County, at Hatfield, on the 29th; and the Wirral and Birkenhead, which opens at Bebington on the 29th.



## STANDARDS—TRUE AND FALSE.

By EDWARD BROWN, F.L.S.

One of the great dangers at this moment is with regard to fancy poultry-keeping, and unless exhibitors are prepared to amend their standards in accordance with the economic qualities, the time will come sooner or later when utility poultry-keepers must adopt their own standards, refusing to be fettered by the false allocation of points published in the standards which have been laid down purely for exhibition purposes.

THE above quotation, reproduced from the POULTRY RECORD of November, 1908, indicates what is a very important question for exhibition and utility poultry-breeders alike, one which should command their careful consideration. Are the last-named to be compelled boldly and completely to discard the standards published, as they do in practice, or are exhibitors prepared to reconsider those standards and amend them in the light of wider experience and the values of economic qualities? These remarks are specially made in view of the new edition of the Poultry Club standards. Elsewhere there are definite signs in this direction. Although poultry standards have not been carried to the same extreme in America as with us, even there a movement is on foot to check the adoption of arbitrary and false points. And in British Colonies and foreign countries a strong revolt has taken place against excessive exaltation of useless characteristics, in many instances directly antagonistic to productiveness.

Standard-making is no easy task. To state in precise words what are to some extent abstract ideals is difficult indeed. For that reason definiteness is often wanting. Further, words do not always mean to the reader what they were intended by the writer to convey. In spite, therefore, of ambiguity of expression, giving a wide range to the individual breeder, there is ever a tendency in the drafting of standards to lay undue stress on that which is of minor importance. Under any circumstances the drawing up of a standard requires knowledge and judgment of a high order, and full credit may be given to those who have attempted so thankless a task, even though they have not fully succeeded. It would, however, be practically impossible for any man or body of men to do more, in the first instance, than form a basis upon which to erect the more perfect structure. To that end, criticism and practical application are needed, so that we may evolve the true ideal. This much must be admitted in justice to those who have been responsible for standards as we know them.

The great mistake made was that those who undertook this duty of standard-making were

fanciers, and not infrequently of an extreme type, who thought merely of external characteristics. Nor could it be otherwise at that time. The only people who had the requisite knowledge of, and could afford the time for, this work were interested primarily in breeding exhibition poultry, and hoped by this method to increase demand and prices for stock. Such as were specially concerned with the egg and meat qualities had neither the opportunity nor the wish to devote themselves to what they regarded as of secondary value. The world, however, has moved considerably since that time. Instead of being of no account, practical poultry-breeders have won an important position, both as to numbers and influence. At one time, when it was mentioned that anyone had gone in for poultry, the assumption was that prize-winning was the object, with the sale of exhibition stock. That is no longer so. Some of our most successful poultry-breeders have never exhibited a bird. And it is not too much to say that, of actual business done in pure-bred stock, for every £100 spent on fancy poultry £500 is paid for fowls which will never make their *début* in the show-room. Hence it is that utility poultry-breeders have the right to demand that their side of the matter shall have equal weight in the determination of standards.

"What is the good of these standards?" may be asked. Probably the majority of poultry-breeders will reply "Not much!" It may be pointed out that judges differ more than do the standards; that one adjudicator favours one type, and another will not have it at any price; colour with a certain judge is everything, and the next man will regard as a determining factor the hang of the ear-lobe. The blessed uncertainties as a result of judges' vagaries add much to the fascination of fancydom. Hard-and-fast judging would probably reduce the number of entries by half. And it is difficult to see how it can be otherwise within reasonable limits, but all must admit that the limitations are broken down. That is the evil of the exhibition system in all classes of stock. So long as no injury is done to the economic qualities it does not matter, but the



fact cannot be denied that, as things are, the result is disastrous. Nearly forty years ago an American writer said :

A standard is but an arbitrary or conventional thing at the best. It is a code of rules of fashion in fowl-breeding.

Fashion is generally folly, sacrificing utility to uselessness. There is as much sense in allowing fashion to determine what a fowl shall, or shall not, be as in expecting that the hapless wearer of a cart-wheel hat should be able to perform any useful function in life. As fashion in human attire is ruled by those who have something to sell, so in poultry-breeding its promotion is inspired by the same spirit. Yet this influence has been permitted largely to determine poultry standards.

Without standards, however, all would be chaos. Our object should be to bring them into line with maintenance of the practical and profitable qualities. Nothing should be permitted which is against the productiveness of the race, whatever that may be. To this end it is essential that the value of every point shall be appraised, so far as that is possible. Upon this side of things our knowledge is manifestly incomplete, and breeders must study questions which have hitherto been neglected. For every characteristic there must be some reason or meaning, if it can be discovered. But one of the greatest evils arising from our present system of breeding is the exaggeration of various points. Take the ear-lobe, naturally small and round. In certain breeds it is allocated a place totally unwarranted. For instance, in Black Hamburgs the English standard provides for 15 points out of 100, or 15 per cent. of the whole. The suggestion is made that a white ear-lobe accompanies heavy laying, but not a large ear-lobe. If true, then it has an economic influence, but assuredly not to the extent of 15 per cent. A score of other examples could be cited, but the foregoing will suffice. What wonder is it that practical poultry-breeders no longer go to exhibition breeders for fresh blood? It was not always so. At one time the exhibitor was a valuable factor in the extension of the poultry industry. He has lost the position as a result of his fondness for abnormal developments. One of our largest and most successful breeders recently, when showing a visitor round his pens, pointed out a flock which he said were for exhibition, and another of the same race for utility. The former were drones, the latter workers. Surely such a condition of things should not be.

What is required most of all is recognition of the fact that the economic qualities have,

at least, an equal importance to the external characteristics. Both are necessary to the completed whole. Hitherto only one has been regarded, that of the lesser importance. We wish the other to have its place, nothing more, but that much without doubt. To the fancier, size of body in other than Bantams may appear of small moment. He may think it desirable to increase or decrease as fashion directs. If by adding a pound or two to the weight he can make the bigger birds fashionable, and thus create a demand for his strain, he gains thereby. But to the practical poultry-breeder size is very important. He knows that for table purposes heavy-boned chickens are slow in growth, cost more to rear, and leave him less profit, but, on the other hand, there must be breadth of frame to carry plenty of meat. If his object is egg-production, then increased size spells delayed functional activity and reduction in the number of eggs, and, as a rule, the heaviest layers are those small in size of body. Yet, what do we find? This and a score of other similar points totally ignored in standards published. In comparing English and American standards, differences are evident which are only explainable by the fact that East of the Atlantic Ocean fanciers ignore economic types, whilst to the West more attention is paid thereto. The signs are that exhibition influences are becoming more potent in America, which would bring about the same condition as here. Take, for instance, a breed largely kept both in Europe and America—the Leghorn. What do the respective standards say about it in two points ?

#### ENGLISH.

Comb—Of fine texture, large but not overgrown, . . . following, without touching, the line of the hackle.

Size — Medium, rather large to be preferred.

#### AMERICAN.

Comb—Of medium size, . . . extending well over back of head, with no tendency to follow shape of neck.

Size—A breed of comparatively small size.

Which is right? It may be answered that English utility Leghorn breeders follow the American type.

The present object is not to go into detail as to the mistakes found in poultry standards, but rather to show that the principles upon which they have been drawn are false, and that in the near future a serious and determined attempt should be made to alter what is a very serious state of affairs. It has been claimed that the fancy is "the backbone of the poultry industry" ; if so, it is afflicted with a fatal spinal disease. It must recognise facts. Things are not what they were thirty or forty years ago. No longer can fanciers claim to be dominant factors. They may form, if they



like, a Second Chamber with limited veto, but nothing more. The real power must be that of the great mass of poultry-breeders, who want standards that are, above all, practical. In the issue of future standards it is all-important that practical qualities shall take the primary position, that the allocation of points shall give full weight to whatever correlates to produc-

tiveness, and that nothing which by itself or in exaggerated form is antagonistic to such shall be permitted. The Poultry Club and the Utility Poultry Club should jointly undertake the task, as representing the two interests, and with equal voice. Then we may hope to bridge the chasm between fancy and practical poultry-breeding.

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## THE POULTRY INDUSTRY IN SPAIN.

By THE EDITOR.

THERE is probably no country in Europe where such antiquated methods of agriculture exist as in Spain. In the Basque Provinces and in the North-West region the system of farming carried out to-day is the same as that introduced by the Celts and the Cantabrians. In Catalonia and the districts bordering on the Mediterranean Sea, the methods employed show no improvement over those practised by the Carthaginians, who dominated Spain over two thousand years ago. The descriptions of the cultivation of the vine and the olive now in use are to be found in the Books of Amos and Deuteronomy, while the writings of Columella, Virgil, and Homer apply in nearly all respects to the Spanish farmers of the twentieth century. The implements are of the rudest; the common plough in Spain to-day is identically similar to those seen on the monuments in Egypt and Asia Minor. While all this is true, however, developments have undoubtedly taken place in many directions during the last few years, and a new spirit of enterprise seems to be taking possession of many of the larger farmers and landowners. At present no separate Board of Agriculture exists, the work being performed by a branch of the Home Office, but strenuous efforts are being put forth for the establishment of a separate department. A few Government agricultural colleges and model farms have been started, among which special mention may be made of those at Vittoria and Valladolid.

To the traveller interested in poultry-keeping Spain is extremely disappointing. We have lately spent a few weeks in the country, during which time we covered a considerable amount of ground, from the Northern frontiers to the Mediterranean Sea, and as far West as Merida, situated on the borders of Portugal. The poultry are disappointing in many respects. For one thing they are kept in surprisingly

small numbers. Without actual statistics it is impossible to say definitely, but we should imagine that in no country in Europe are there less in proportion to the acreage, and yet there are parts of Spain that are probably among the most favourable in the world. True, some districts are barren and treeless, where the heat is intense during the summer and the cold equally intense during the winter. There are few things that strike the visitor to Spain more forcibly than the paucity of trees. One may travel for scores of miles without seeing a dozen trees, while in nearly all parts of Spain hedges are conspicuous by their absence. There are districts, of course, where forests abound, but in many parts, particularly in Central Spain, the country consists of vast treeless steppes. The ancient Spaniard regarded the presence of trees as harmful to agriculture, with the result that he cut down his forests wherever possible. At one time the country around Madrid was covered with forest land; to-day the city stands isolated in the centre of a treeless and barren plateau. The fatal mistake of the ancient Spaniard is fully recognised to-day. Efforts are being put forth to counteract the evil he has done, and in some parts reforestation is being commenced. The barren land is not very favourable to poultry, it is true, and we were told by a farmer's wife who lives near the town of Burgos, in Northern Spain, that she had found the provision of shade a matter of extreme difficulty.

Spanish fowls are also disappointing so far as their economic qualities are concerned. Probably ninety-nine out of every hundred belong to the laying or non-sitting class, and naturally their table properties are poor. So far as we could discover, no attempt whatever is made to keep any record of egg-production, and thus it is impossible to judge with any degree of certainty whether Spanish hens are satisfactory or not. Personally, we should



think the average production per head very much below that of England. This is not surprising, for the Spanish poultry-keeper seems to pay very little attention to the selection of

unnecessary to refer at any length to the well-known breeds ; but a few remarks on those unknown outside Spain may be interesting. The Castilian resembles the Minorca very



APEX HOUSES IN A SPANISH PALM GROVE.

his stock, and breeding seems almost entirely a matter of luck.

There are six recognised Spanish varieties of fowls, some of which are well known to the English poultry-keeper. The most cele-

closely indeed ; as a matter of fact, experts are of the opinion that the Castilian is the original type, not only of the Minorca, but of several of the other varieties. The chief value of the Castilian lies in its excellent laying qualities ;



SEÑOR CASTELLÓ'S RANGE OF SCRATCHING-SHEDS, NEAR BARCELONA.

brated are the Minorca, the Andalusian, and the once-famous Black Spanish ; those but little known outside their own country are the Castilian, the Barbezieux, and the Prat. It is

as table-fowls they are extremely poor. The chickens are hardy and develop rapidly. The fowls are slight in body, tall, and very active ; the comb is upright, the ear-lobes are white,



and the face red. The weight of an adult male averages from 6lb. to 7lb.; that of a female from 5lb. to 6lb. The Barbezieux is generally included among the French breeds, but, as the author of "Races of Domestic Poultry" points out, it should really be included among the Spanish varieties, since it has probably originated from the Castilian

the quality of his flock. We were able to find out very little about the usual methods of feeding, but it seems that anything is regarded as suitable. In the North maize is mostly fed; in the South feeding is generally unnecessary, owing to the wonderful fertility of the soil. The less said about housing the better; for in the majority of cases the sheds were insani-



SPANISH STUDENTS AT WORK ON SEÑOR CASTELLÓ'S POULTRY FARM.

crossed with the Gascon, the progeny again being crossed with the Castilian, and thus Spanish blood greatly predominates. The Barbezieux is a good layer, and the eggs are large, averaging nearly  $2\frac{1}{4}$  oz. each. Unlike most Spanish breeds, the hen is a reliable sitter and a careful mother. The chickens grow quickly and are hardy. The edible qualities are good, the flesh being delicate, white, and of a fine flavour. The birds belonging to this variety are large and long-bodied, with a long head, a single comb, red face, comb, and wattles, and white ear-lobes. The Prat belongs to Catalonia, where it is very popular. It is of the General Purpose class, the hens being good layers, while the flesh of the chickens is of excellent quality and texture. The weight of an adult cock varies between  $6\frac{1}{2}$  lb. and 9 lb. and that of a hen between  $5\frac{1}{2}$  lb. and  $7\frac{1}{2}$  lb.

In a country so backward in its methods of general agriculture it is natural that the science of poultry-keeping is almost unknown. In many parts the most primitive methods are adopted, and such things as incubators, brooders, trap-nests, &c., are not only unused, but are unheard of. There are, it is true, a few exceptions, but, taking the country as a whole, there seems no desire on the part of the poultry-keeper to improve his methods or

tary, they were dark and badly ventilated, while little or no attempt was made to white-wash the interior or to remove the manure.

The beginnings have been made for securing a better state of things, but as yet only the more wealthy have been influenced to any extent, either as amateurs or exhibitors. That, however, is the way of development in every country, and the results will doubtless be seen later. Senor Don Castelló has been largely responsible for such progress as has been made, and his Poultry Establishment and School is doing excellent work in this direction.

In no country of the world is the poultry-keeper more favoured than he is in Spain, and if the rural population can be convinced that poultry-keeping is a profitable pursuit, and will but take up the matter seriously, an important and profitable industry may be established. The conditions in many districts, particularly in Andalusia in the South, are nothing less than ideal. In a country where olive, orange, and lemon groves abound; where the sugar cane and the cotton plant thrive; where dates and raisins are cultivated in large quantities; and where thousands of acres of vines exist; poultry would yield excellent results, and would increase the incomes of the peasants, the majority of whom are miserably



poor. In France fowls are usually regarded as a necessary adjunct to a vineyard, and we were once assured that without the presence of fowls grapes cannot be grown so well. For ten months out of the twelve they do an incalculable amount of good, removing harmful insects, supporting themselves upon the grubs and insects they procure, and adding to the fertility of the soil. Small holdings of from four to ten acres exist in huge num-

bers in many districts of Spain, and upon these it would be thought poultry would be largely kept, but upon very few are any fowls at all to be found. The Spaniard, although he has the character of being indolent and possessing no initiative, is a practical and sensible fellow, and we are sure that once he can be shown that poultry are a source of profit, he will immediately adopt this important branch of agriculture.

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## BREEDING FROM RELATIONS.

By C. J. DAVIES.

IN a previous article the writer suggested the best methods to adopt when endeavouring to establish a strain which will breed true to type, and constitute a source of pride and profit to its owner. The system advocated was one of more or less close inbreeding, the whole scheme, indeed, depending upon the mating together of birds which were near relations. Many people are, we know, deeply prejudiced against consanguinous mating, holding that it leads to more evil than good, and that in the long run no benefit will be derived from it. There can be no doubt whatever that a system of inbreeding requires judicious handling. We do not for one moment deny that strains have died out, that fertility has been impaired, that disease has been rampant, owing to a course of severe and unrestrained inbreeding. The stories one hears from time to time of disasters which are traced solely to the mating together of nearly-related individuals are no doubt perfectly true. It is probable, indeed, that they will occur again and again, because there will always be breeders who are unable to exercise discretion in their choice of stock and methods of mating. None the less, inbreeding is the most powerful weapon available for the production of stock of a definite type, and in judicious hands it is as potent for good as in inexperienced ones an influence for evil.

A good many people fall into the error of supposing that by mating near relations of any sort they are going the right way to induce the creation of "improved" stock. To clear this point up, we must first inquire into the exact action of inbreeding. An organism—an individual, a fowl—is to the eye a complete whole or entity. When analysed, however, it is found to be nothing more nor less than a composite, and an extremely complex one at that. It is, in fact, an aggregate of innumerable factors which, combined in a certain way, constitute a whole—a fowl. Nature never seems

to make two things exactly alike. Two animals of the same variety are seldom precisely similar, although they may be so like one another that superficially we call them alike.

Briefly stated, the work of the fancier is to perpetuate certain characters which exist in the variety in which he is interested. As already stated, a bird is a composite creature, the result of the combination of a number of factors. It carries in its germ cells a number of separate units representing all the characters which go to make it in the first place a fowl, in the second place a fowl of a certain variety. To produce a chicken, it is a well-known biological fact that the union of two germ cells (male and female) is necessary. These germ cells which we speak of as a whole are, as already hinted, in reality extremely complex—just as complex, in fact, as the organism which gives them birth. They contain potentially all the separate units which will reproduce a fowl of a certain class or variety. But, just as the union of two germ cells is necessary for the production of a chicken, so the union of two similar units (of which these germ cells are composed in the aggregate) is, broadly speaking, necessary for the production of a definite character.

When we mate two fowls of the same breed and strain we get progeny wonderfully alike both to each other and to the parents. When we mate two fowls of the same variety but of different strains, we get chickens of the same variety, but probably differing very much in minor characters. When we mate two fowls of different and differing breeds, stability is quite lost, and we get what are called mongrels of all shapes and colours. When we mate different species of animals, so great is the difference in the composition of their germ cells that if young result they are usually sterile (mules); in more remote cases no young are obtained at all. Therefore, we see that to produce young like each other and like their parents, and with



the capacity for the reproduction of similar individuals, not only must the germ cells come from similar individuals, but their composition (the units of which they are composed) must be similar.

Assuming that the variety of fowl in which we are interested is for all practical purposes pure, then in the majority of cases similar units unite at every mating, leading to the production of uniform progeny. Prize stock, however, are usually birds with the superficial characters very marked or exaggerated. Exactly why or how (physiologically) an exaggeration in these characters is acquired is at present unknown to science. What is known beyond doubt, however, is that in practice the continued union in succeeding generations of similar units causes variation in the intensity of the characters they represent. Also that by further selection and mating together of those individuals which vary in the same direction a preponderance of young like them will be produced, and a small proportion will probably come with an even more marked inheritance in a similar direction. Therefore the production of winners from pure stock may be said to depend largely upon the inheritance of fluctuations; to ensure the inheritance of fluctuations both parents must possess the power to transmit them.

It is obvious, when the matter is thought out, that birds nearly related to one another are more likely to carry the same factors in their germ cells than those of different strains. When we inbreed we work with a view to securing not only the union of similar classes of units, but ones with the tendency to variation (fluctuation) in certain directions. As already stated, when two absolutely similarly constituted units come together at a mating, the character they represent is transmitted to the offspring. By carefully selecting and inbreeding a strain, then, not only does the skilful breeder concentrate in the germ cells of his stock all the qualities he requires, but he does so at the expense of the undesirable features, which become almost automatically eliminated in the process. It is, therefore, obvious that inbreeding—the mating together of birds which are nearly related and which consequently carry in their germ cells a preponderance of similar units—is the only certain method of bringing similar units within reach of one another. It is always chance, when wide choice is available, which units unite at a given mating; but provided the right material is there (in the strain), then it is bound to become so sorted out occasionally that the exact combination is affected which results in the perfect animal. The nearer the relationship (broadly speaking) the less chance is there of divergence, and the larger will be the proportion of high-class stock produced.

It will now, perhaps, be seen that it is absolutely essential that the qualities it is desired to perpetuate are present in the strain. It is no good buying bad birds and inbreeding them in the expectation of getting better ones from them. Inbreeding perpetuates what is already there; it creates nothing new; and if the birds are bad ones to start with, then to inbreed them is simply to ensure the reproduction of the faults. It is essential, when starting on a system of inbreeding, to see that the foundation stock has *all* the points required. Maybe these characteristics may be spread over several individuals, the cock having one or two very desirable features in marked degree, one hen others, another hen still more. The art of the breeder lies in combining all these points in one perfect descendant in the fewest possible number of generations.

We will now turn to a brief consideration of the evils which it is admitted may result from consanguineous mating. We have shown, roughly, how desirable characters are inherited by mating together birds which possess them. What the thoughtless breeder sometimes overlooks is that the undesirable ones are subject to precisely similar principles of heredity. Size is very soon lost if a small bird is put into the breeding-pen and inbred to. Sterility will ensue in the course of a few generations if an unsatisfactory breeder is allowed to do his best "because he is such a good bird," and his progeny are inbred. Constitutional weakness, delicacy in youth, leg weakness, predisposition to zymotic disease or parasites—all these may become multiplied by inbreeding simultaneously with the correctly-laced feather and the beautifully moulded comb. Therefore, when carrying out a system of inbreeding, it is even more necessary than at any other time to eliminate all birds which fail in vigour or exhibit at any period of their career a want of robustness. It has been the keeping of a sickly but show-perfect individual for breeding purposes which has led to the wrecking of many a noted strain.

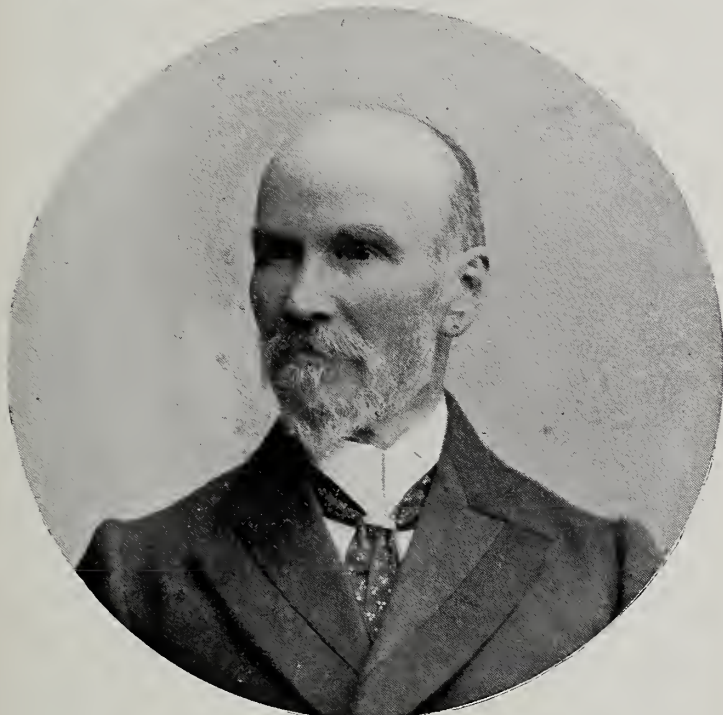
If rigid selection is exercised with regard to the choice of constitutionally perfect stock there seems to be no reason why animals should not be inbred closely with impunity for an indefinite number of generations. Inbreeding seems to be a natural method of mating. As far as one can tell, it does not in itself weaken stock or cause disease or any other deteriorating quality; but then under natural conditions no animal survives which has not proved itself fitted for a strenuous struggle for existence. The closer inbreeding is carried out, the more rigid must be the fancier's selection for constitutional qualities: omit this precaution, and failure is bound to result.



## WHO'S WHO IN THE POULTRY WORLD.

## MR. WILLIAM KEYS, J.P.

EARLY influences profoundly affect the life of every man. Such is the case with Mr. William Keys, who is the son of a North of Ireland farmer, himself a lover of poultry. On the farm Game-Fowls had an honoured place, kept not for exhibition, but for the fighting record of their ancestral line. Trained as a schoolmaster, first in Ireland and subsequently at Edinburgh, Mr. Keys has recently retired after thirty-eight years' service as schoolmaster in Aberdeenshire.



MR. W. KEYS, J.P.

During the last twenty years at Kintore, Mr. Keys bred many varieties of fowls for experimental purposes, specialising in Brown Leghorns, and his strain has been most successful both at home and abroad. One of his latest records is that birds exported to Mr. W. Brown won first and championship at the Royal Agricultural Show, Sydney, New South Wales. On the formation of the Scottish Leghorn Club, Mr. Keys won in three successive years the Challenge Cup for Brown Leghorn pullets, and on the cup being replaced, he again repeated this notable victory. This second cup he returned to the club with a voluntary self-denying ordinance not to compete in future.

Mr. Keys has been, and is, a regular writer on the Press, chiefly in Scottish papers, and has endeavoured to widen and deepen interest in poultry, chiefly in view of their possibilities of benefit to the State as well as the individual poultry-keeper. During the last year he has conducted a series of experiments to demonstrate practically that poultry kept for egg-production would amply remunerate farmer, crofter, and cottager, and of his report ten thousand copies have been issued for circulation in the North of Scotland. Mr. Keys is a Fellow of the Educational Institute of Scotland, and a J.P. for Aberdeenshire.

## PROFESSOR F. C. ELFORD.

THE Macdonald College at St. Anne-de-Belle-vue, in the Province of Quebec, is probably the finest agricultural college in the world, and has a strong poultry section which is in charge of Mr. F. C. Elford, who was trained at the Ontario Agricultural College at Guelph. On the completion of his course he spent some time in farming, specialising in hogs, cows, and chickens. The call to a wider opportunity came when Professor Robertson instituted fattening stations under the Central Government. Mr. Elford was placed in charge of that at Hornesville, Huron Co., Ontario, and afterwards, on the resignation of Mr. F. C. Hare, was made Chief of the Poultry Division at Ottawa, which position he continued to hold until four years ago, when the Macdonald College was founded. To the latter he accompanied Dr. Robertson, and there he has built up its splendid poultry plant. Recognising the importance of better methods of marketing, Mr. Elford was largely instrumental in establishing the Poultry Producers' Association of Eastern Canada, of which he is secretary, and by which it is hoped to secure the adoption of co-operation in the sale of produce. Professor Elford is an honest worker, and is one of the leaders of modern developments in Canada.



PROFESSOR ELFORD.



## POULTRY AT THE AGRICULTURAL SHOWS.

By W. M. ELKINGTON.

THE more important agricultural societies throughout the country have given ample recognition to one particular branch of the poultry industry, and there can be no doubt that the patronage of such influential bodies as the Royal Agricultural Society of England, the Royal Counties, the Bath and West, and the Royal Lancashire, and many more county associations has conferred a very great benefit upon, and put thousands of pounds into the pockets of, people who breed poultry expressly for exhibition. Few will grudge the patronage thus extended to a section of the industry that has earned distinction throughout the world for its skill and enterprise, but on the other hand fanciers themselves (and I propose to write as a fancier) will readily admit that there are other branches of the industry that deserve attention, and that are capable of being turned to even better account for the rank and file of agriculturists.

We must not forget that the breeding of high-class stock for exhibition purposes is a business that provides great opportunities for farmers. It is a fact that a large proportion of the successful poultry fanciers in this country, who are actually making money out of the business, belong to that great and influential class known as the tenant farmers, and they, with their native skill in breeding live stock, and the natural advantages which their position provides, are undoubtedly the most likely people to make a commercial success of this particular work. We have seen in scores of cases how men who have commenced in a humble way with utility fowls, having an inclination for the breeding of prize stock, have developed into successful breeders and exhibitors, and it is this fact that doubtless encourages the promoters of the great agricultural shows to retain the poultry sections as a prominent feature of their exhibitions. It is worth while to keep a business of this kind prominently before the more enterprising agriculturists, and to encourage them to take part in it if it will put money into their pockets. That, I take it, is the aim and end of all agricultural shows. The encouragement of stock-breeding in all its branches is designed for the benefit of those who live upon the land, and to enable them to get more out of it. Therefore the presence of exhibition poultry at agricultural shows is by no means an anomaly. The pity and the wonder are, however, that other branches of the industry do not receive the same encouragement.

It is not every farmer who has the inclination to become a fancier. It is not every man who has the ability and the particular gift of concentration that makes the successful exhibition breeder. Among agriculturists, indeed, the proportion of fanciers to utilitarians would probably be found ridiculously small if a census were taken, and it is no use pretending that we want to press the rank and file into the fancy business, because circumstances make it clear that they would not be likely to make a success of it. Let every man stay in his own groove unless he is pretty certain that he can better himself by getting into another. And if a farmer can make money by keeping fowls for egg-production,

and takes a real interest in them, it may be accepted that that is his *forte* just as exhibition work may be another's.

But whereas the fancier farmer is catered for at the majority of the great exhibitions, the utilitarian receives little consideration, and in some cases none at all. Some little time ago I was present at a country show when a farmer and his wife came into the poultry tent, at that time nearly empty. They were evidently not fanciers, and by their remarks one would judge that they were ignorant of the names of the breeds. Presently I heard the farmer ask a steward if that was the only display of poultry in the show. As a matter of fact, it was. There was not even a class for dead fowls. Now, this particular farmer was just getting interested in poultry. He and his wife had been reading, and had come to the conclusion that they might do a good stroke of business by replacing their mongrels with pure-bred fowls and keeping them according to the system so strongly recommended, and they had come to this show in the hope of seeing some good fowls and learning something about them. Well, the good fowls were there, and they were welcome to learn what they could. Apart from the intricate fancy points, which they would not understand, they may have noticed that the prize exhibits were generally of a remarkable size, that they were very clean, and very tame, and very handsome—but what satisfaction is there in that for a man who wants a demonstration in poultry-keeping for market purposes?

Did I say there was nothing to appeal to the utilitarian? If so, I was in error, for there were two classes for eggs, and the winners in each were very large (the farmer's wife thought the white eggs were double yolked), and the winners in the brown class almost approached the colour of copper, and were beautifully polished. I fear the farmer's wife must have been somewhat alarmed. If these were a fair sample of what one's hens ought to produce, how could she attain such proficiency? A man in the show who may have known something about it told me the winning brown eggs were a stock sample. They had won at two or three shows already, and would probably win again if the judge did not break one. They were not meant to be broken, any more than the big Black Orpington hen, that weighed nearly as much as a turkey, was meant to lay eggs. Both were show specimens, admirable in their way, but of no use whatever to the man who wanted to learn something about hardy breeds for egg-production on an exposed farm. I am afraid the good farmer and his wife went away with a very hazy notion of the benefits this particular show conferred upon people of their class.

It is only fair to state that some of the agricultural societies do make a show of catering for the utilitarian, though, in some cases, the effort is obviously dictated by people whose intentions are better than their deeds, and who appear to imagine that one or two classes for dead fowls fill the bill. But do they? What encouragement or instruction is there in these classes for the average general purpose poultry-keeper? The prizes usually go to the biggest and the fattest fowls in the class, and no practical demonstrator would dream of suggesting these are the kind the farmer should produce. As a matter of fact, such exhibits are liable to mislead,



and there is nothing whatever to suggest the possibilities of spring-chicken breeding as a profitable line for the farmer. Why not introduce classes at these summer shows for table-chickens under the age of four months, and give the people a real object-lesson in producing early table-birds for profit? I find there are many farmers who still cling to the belief that you must keep a chicken till it is six or seven months old before it is correct to kill it. You can't convince them that many of these birds would realise more money, if fed up, when little more than three months old, and it needs a demonstration such as I suggest to drill the fact into them. I think some of our friends in the Southern counties will agree that it would be an eye-opener to many people. They could show chickens weighing four to five pounds apiece when little more than three months old, and these are the kind the farmer should and can produce in greater quantities if he is only shown the way. The huge, obese specimens can be left to the professional exhibitor or the Christmas fat-stock people, like the big Orpington hen and the polished brown eggs.

Talking of eggs, why need they be shown in dozens or half-dozens? Why not in fifties and hundreds? What matters it, if a man has one or two layers of phenomenal eggs, if the others are mediocre? The dozen-egg class encourages the production of freaks, whereas if you stipulated for a box or basket of fifty or a hundred you would be doing more to encourage breeders to strive for uniformity, and at the same time you would be putting a premium upon careful packing. Some shows have already adopted this plan, and it has answered well. But the general tendency is to cater for samples, which in many cases by no means represent the bulk of the quality produced. It would be good to give prizes for packing large quantities of eggs in boxes, crates, and baskets, without so much regard to the quality of the eggs. We are constantly telling our farmers they are losing ground in regard to marketing, in comparison with the people of other countries, and here is a chance to rub it in. Here in my own district, with market towns in plenty, half the farmers keep their eggs from one market day to another, not so much for the sake of convenience, but because it is customary, and the buyers and consumers have put up with it for so long that it has become a custom with them as well. Surely the agricultural shows can lend a hand in driving home a few of these necessary lessons.

I may be told that many of the societies provide lectures and demonstrations in dressing table-fowls, and various details connected with the utility industry. That is true, and it is a very good thing; but we want more of it. I have often wondered, when watching these gatherings, how many of the onlookers could go home and repeat the operation so deftly performed by the operator upon the dead fowl. I once tried to learn a lesson in trussing in this way, but it was not a success, and I had to go to the demonstrator for individual guidance. Moreover, in a great many cases there is nothing but a lecture, and with all respect to our able poultry speakers, I do not think that is sufficient. There should be more practical demonstrations. Many times I have stood outside one of those round gauze tents in which apiarists deliver

their lectures, and have watched with interest the practical demonstrations in the various processes for the extraction of honey, &c., and, like many more, I have learned something. Now, why cannot our agricultural shows, which seldom want for space, provide extensive demonstrations in the management of a poultry-yard, with experts in attendance to explain the why and the wherefore of everything? Such a demonstration would sink into the minds of everyone. A good illustration can convey the meaning of whole pages of print, and will have a more stimulating and lasting effect upon the minds of many people.

The utility industry does not lend itself for competitive purposes like the Fancy. Classes for pure-bred or cross-bred laying hens and for live table-chickens convey little meaning and promote less interest, and in many cases the former are a mere farce. At one time, when laying-hen classes were fairly popular at shows in the North, it was regarded as essential that the winner must be a blue fowl with a rose-comb, and out of this custom arose the species known as the Rose-combed Blue. It by no means followed that the winners were the best layers; indeed, one cannot imagine how a judge could possibly distinguish the best layer by mere superficial scrutiny, and I believe it is usual to select the hens with the largest and brightest combs, which suggest that the birds are laying at the moment. And, after all, what better principle could be adopted? At any rate, it must be generally agreed that these classes can be of no practical value, though some societies retain them by way of satisfying their utility members. And that being so, the only competitive classes that are likely to benefit the utilitarian are those for dead and dressed fowls, especially young chickens, eggs in bulk, and packing. For the rest, the shows can best assist the general purpose poultry-keeper by means of demonstrations and lectures, which, it is to be hoped, will be extensively developed during the next few years. For it must be generally agreed that it is undesirable to suggest that the Fancy is the only branch of poultry-keeping deserving the recognition and support of the agricultural societies.

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## THE HOUDAN.

THE Houdan fowl belongs to the races of France, and as such it is one of the oldest, mention being made of the breed in the 1853 edition of "The Poultry Book." It has been known as the French Dorking; and so far as its short legs, five-toed feet, and general shape and carriage of its body are concerned, it certainly gives one an idea of the Dorking. Of course, it is a crested breed, and with a leaf comb, and therein it differs from the English "breed of breeds." The Houdan, like most, if not all, of the French breeds, was cultivated primarily for its utility properties; and as a general purpose fowl it holds its own with the best, provided it is kept in a suitable climate and is not bred to extreme points for the show-pen. The chickens are hardy; and for table purposes the cockerels are ready almost at any time, either as milk chickens, spring chickens, or as yearlings, provided they have been kept alone and not allowed



with hens or pullets. The pullets, too, make first-rate table-fowls, but they are more profitable as layers when kept for utility purposes.

The chief thing about the Houdan for exhibition in this country is its head, which includes crest and comb and muffling. Taking the points separately, as given in the Poultry Club Standard for the breed, size ranks first with eighteen points in the cock and twenty in the hen; but since in the male bird comb is fifteen, crest twelve, and muffling eight, and in the female crest is fifteen, muffling twelve, and comb eight, it will be seen that in either sex head points, as they may be termed, are thirty-five out of an ideal hundred. And most exhibitors of Houdans find that good birds in this direction are by no means easy to breed. There is also a difficulty in keeping the crest in good condition for the show-pen; and it is possibly owing to this that the breed is not much of a favourite at the exhibitions nowadays. Certainly, some fanciers have made too much of head points, and there can be no doubt that it would have been better for the breed had this point not been so exaggerated as it has been of recent years.

Colour, which presumably includes marking, is given fifteen points, and that may account for the almost self-black fowls which have won as

Houdans at more than one important show during the past two or three seasons. The Houdan is a mottled fowl, pure white mottles on glossy green-black ground, and the markings should be clean and evenly distributed, except in the cock's tail, the sickles and coverts of which are irregularly edged with white. On the one hand, a black fowl should be avoided, and on the other, one with too "gay" markings—*i.e.*, showing more white than black.

## THE CAMPINE.

WHAT is the difference between the Campine and the Braekel? was a question often asked when the Campine was first boomed in England. And the answer invariably was: They are the same breed! Maybe they were; maybe there was a difference; but the only apparent one was in size, the Braekel being the larger, or, shall we say? not so small, since neither breed can be ranked as

large. When first brought over here from Belgium or Holland (it matters not which, since the breed shows signs of belonging to the races of Eastern Europe) the lobes were red, and the endeavour was to get the cock's saddle-hackles and back of similar colour to that of his neck-hackle—*viz.*, pure white, with a silver gloss rather than what is known as "dead" white. All this, however, is now changed. The lobes of the Campine must be white, and while the cock's neck-hackle must be pure white, the remainder of the plumage must be barred—there must be no silver back and saddle. But in the opinion of most breeders it is a change for the better.

Perhaps the most difficult point about breeding the Campine to show points is to get pure ground colour combined



HOUDAN HEN.

with regular marking. The ground colour is white, and the barring pure black, with a beetle-green sheen, every feather being barred in a transverse direction, with the end white. The markings must be cleanly cut, the black and white clearly defined. On the breast and underparts of the body the bars may be straight or slightly curved; on the back, the shoulders, the saddle-hackle, and the tail they should be of a V-shaped pattern; on the remainder of the body,



straight across the feathers, so as to form, as near as possible, rings around the body, the bars being three times the width of the ground colour. And as can be imagined, a well-bred show-bird is truly a thing of beauty.

Most specimens which have been exhibited so far fail chiefly in breast-marking—there is too much white noticeable, and the markings are often in the character almost of spangles. Then, too, it is no easy matter to get the fine lines of white which, when correct, give the bird a distinct characteristic—too often they are coarse and not sharply defined. In hens a clear neck-hackle is not easily bred; and, again, it is almost a common failing to have the back of a golden tinge, or not openly enough marked, or even “mossy,” as it is termed



SILVER CAMPINE HEN.

in fancy circles. But fanciers have not had the Campine in hand for many years, and it is just the one for a true hobbyist to take up, since it is a difficult one to get to standard requirements. However, an advance has been made, and a substantial one, too.

From a strictly utility aspect, the Campine must be classed as a layer, and, no doubt about it, its qualities in this respect are great, the birds being small eaters, and the eggs large enough to be readily saleable although with white shells. However, the colour of the shell is not such a great point nowadays; the thing is to get eggs and plenty of them at a time when they fetch the best prices.

## FANCIERS AND FANCY MATTERS.

By W. W. BROOMHEAD.

*Encouragement for New Breeds—The Poultry Club and Judges—Profits from Shows—Hatching Results—Some Changes—Black Sumatra Game—An Essex Fancier.*

### ENCOURAGEMENT FOR NEW BREEDS.

The suggestion made in last month's "Diary" of the ILLUSTRATED POULTRY RECORD on page 462 is well worth consideration; and it is to be hoped that at one of the front-rank events during the coming autumn or winter it will be given a trial. It is often a difficult matter with show promoters to attract the public, and more difficult at winter than at summer events. The aeroplane demonstrations at the Herefordshire and Worcestershire Agricultural Society's Show last month no doubt proved a great draw, but "something in the poultry line" should prove more serviceable when the weather is against 'planing. That a good entry would reward the enterprise of a show committee who put on a special class for novelties I have no doubt. The only difficulty, in my opinion, would be the judging of it. As a rule at present, the only place for new breeds or varieties is in the "Any Other Variety" section, unless those who have the novelty in hand go to the expense of guaranteeing classes for it. But at more than one exhibition throughout the season the novelties would not be eligible even in the "Any Other Variety" classes, since it is not rare to find the "tail end" specified as "Any Other Recognised Breed." It is true, however, that under existing conditions most new breeds or varieties have to make their trial trips in competition with old-established kinds; but it is equally true that most of the latter belong to those sorts which help to remind us of bygone times. They seldom, if ever, get classes to themselves nowadays; one often sees in those classes breeds which, were it not for the "Any Other Variety" provision, would long ago have been defunct and forgotten. Thus, to mention only three, one finds the Spanish, the Polish, and the Frizzle often competing successfully in the "A.O.V.," and rarely are they catered for in any other way. But to return to the class for novelties, it strikes me as being an excellent idea, and Mr. Threlford might take the hint when fixing up the schedule for this year's International.

### THE POULTRY CLUB AND JUDGES.

We have not heard the last of the "judge-must-be-a-member" question that has caused a flutter of late in poultry circles. And no wonder! Some of those who are against it tell us that it was a most coercive measure. The very idea! To judge at a show held under Poultry Club Rules one was expected to be a member of the club! Never heard of such a thing! And yet, strange is it not? a judge is not allowed to officiate at a specialist club show, save in very exceptional circumstances, unless he is a member of that same club! Is *that* a coercive measure? Think it out. There are exceptions, of course. Last year I judged the Silkie Club Show at the International, although I am not a member



of the Silkie Club; but it is the exception that proves the rule. Why, I know of a specialist club that even went farther than debarring a judge at its own event. Some few years ago I was announced to officiate on certain classes at an exhibition which gave more than the usual classification of cock and hen for the one breed. The secretary of the show, who was anxious to get a representative list of club specials, wrote for one to the specialist club which was supposed to encourage the breed after which it was named. But the special was refused, because I was not a—member! No; the “judge rule” of the Poultry Club is no coercive measure; it is one that aimed for the purifying of the Fancy, and as such it deserved a trial. But it will come into force before long, or I am very much mistaken as regards the feelings in poultry circles.

#### PROFITS FROM SHOWS.

It is generally thought that to “run” a specialist show is a good source of profit for the promoters. It may be so in some cases, but that it is not always a very profitable undertaking has been demonstrated on more than one occasion. Take one show as an example. I have seen the balance-sheet, but I have been asked not to make it public, hence I will not mention the name of the event. Were I to do so, I think it would be acknowledged that it would be impossible to get a finer display of its kind than that which always turns up at the show. It is something to say that here, at least, the entry fees more than covered the prize-money; but if it had not been for a good list of donations, there is no question that, financially, the exhibition would have been a dead failure. As it was, the judging fees were not a serious item of expenditure; but, on the other hand, the takings at the gate were very small, the sale of the catalogues did not cover the cost of their production, and the sales of birds were so poor that the net result of commission in this direction amounted to six shillings and sixpence! However, there was a balance in hand, something like £2, so the event is not dead yet. Of course, during the past few years some shows have felt the pinch of hard times. Birmingham, one of the oldest poultry exhibition in this country, is among them. I hear that the last year's working has resulted in a loss of several hundred pounds, and had it not been for the rents received by the letting of Bingley Hall (the property of the Birmingham Agricultural Exhibition Society), the event would have closed down long since. On the other hand, some of the big shows do more than pay their way; and now that the International is firmly established at the Crystal Palace, I hear that the promoters are making a good thing out of it. This is, of course, a show run by fanciers for fanciers, and it is in every way thoroughly up to date.

#### HATCHING RESULTS.

Now that the show season is in full swing once more, one is enabled to get some idea of hatching results. I hear from Mr. Richard Watson (Thorn Garth, Thackley, Bradford) that he has a good “crop” of Partridge Wyandotte chickens; and although the weather during the rearing period was not of the best, the young birds have all done well.

The variety, it is pleasing to hear, is going as strong as ever, and he has had a splendid demand for eggs and stock, both at home and abroad. Mr. Frank Bloomer (Foxcote, Stourbridge), who specialises in Orpingtons, also reports satisfactory results; and at his farm there are between 400 and 500 Blacks, Whites, and Buffs of various ages, many of the earlier chickens being of exceptional promise. Mr. Tom H. Furness, of Chesterfield, who is well known in Wyandotte circles, has a fine lot of chickens at his establishment. Among the most forward are Blacks, Blues, Golds, Partridges, Silvers, and Whites, while of other breeds kept there are Leg-horns, Black Orpingtons, and Barred Plymouth Rocks. Mr. Furness does not believe in a late breeding season, and by the end of April he had finished hatching operations, since he then disbanded his breeding-pens. An especially select “crop” of Buff Cochins is to be seen at Mr. George H. Procter's yard at Flass House, Durham, where also have been hatched this season some choice Buff and White Orpingtons. Since it is Mr. Procter's intention to exhibit more extensively at the leading county and agricultural shows there is no doubt that others will have to look to their laurels this season. Another fancier who combines Cochins and Orpingtons, or at least exhibits the two breeds, is Mrs. Powell, who has recently removed from Chalfont St. Giles to Orpington, Kent. This latter fancier specialises in Buffs of both breeds, but in addition she keeps Black, Blue, Jubilee, Spangled, and White Orpingtons, Black and White Cochins, White Wyandottes, and Black, Buff, and White Pekin Bantams. Among Bantam specialists, Mr. R. Fletcher Hearnshaw, of Burton Joyce, Nottingham, has done well with his chickens, and among them are many promising Scotch Greys, Black Rose-combs, and Silver Sebrights. Mr. Hearnshaw is also breeding Cuckoo Polish Bantams, which he hopes ere long to introduce to the show-pen. This variety of Polish Bantam has been defunct since 1886.

#### SOME CHANGES.

Writing of Bantams reminds me that Mr. D. W. Purdon, of Eastholme, Driffeld, Yorks, who, by the way, has had a most successful breeding season, recently acquired the entire stock of Black Spanish Bantams owned by the late Mr. F. Waller, of Barnes, London, but has since sold them to Mr. Fred Entwistle for export to America, where they appear to be in demand at present. Mr. Purdon has also added to his big stud of Bantams by purchasing some particularly fine Rumpless and Black Frizzle miniatures, so we will be seeing his name figuring well at the shows during the coming season. Mr. Francis H. Lowe, of Three Thorns, Moor Lane, Wilmslow, Cheshire, the well-known Columbian Wyandotte specialist, has been compelled to relinquish the Fancy, owing, I much regret to learn, to continued ill-health. I am glad to hear, however, that this famous stud will not be lost to the Fancy, since the whole of it has been purchased by Mr. Clifford Milne and his friend, M. Maurice Hénon, of Paris, the purchase including not only the old birds (which have won cups, medals, and other valuable prizes at such important fixtures as the Club Show, the Palace, the Dairy, Birmingham, Hayward's Heath, Lancaster, and Altrincham), but all of this year's



chickens bred from them. The birds will in future be exhibited in the joint names of Milne and Hénon, and will be located at Mr. Milne's farm at Whaley Bridge; and all correspondence concerning them should be addressed to Mr. Milne, at Woodside Cottage, Whaley Bridge.

#### BLACK SUMATRA GAME.

To encourage fanciers and others to take up the exhibiting of Black Sumatra Game Fowls, Mr. F. R. Eaton is offering some special prizes through the medium of the Black Sumatra Game Fowl Club. These are a cup as first and a pen of Black Sumatra as second. The conditions for competition are as follow: "(1) The cup will be awarded to the exhibitor who has scored the most points in shows between June 1, 1910, and January 1, 1911, both inclusive. The points will be eight for a first prize, seven for second, six for third, five for fourth, four for 'reserve,' three for V.H.C., two for H.C., and one for C. (2) Those who intend to compete must notify the hon. secretary (Miss Clara Rilot, Marston, Northwich, Cheshire) of all points scored by them within ten days; and if called upon to do so, they must produce proof of having scored the points." The club is anxious to make the scheme known "far and wide," so that fanciers who keep the Sumatra and yet are not members of the club may be induced to enter for the prizes. It is certainly time that something was done to give the breed a "boom," mild though it may be, since it was not exhibited in any great numbers during the past season.

#### AN ESSEX FANCIER.

The little excitement over her much-debated Rose-combed Barred Plymouth Rocks is likely to make some forget that Mrs. William Rice has genuine claims as a practical breeder of several varieties of poultry. At Rettendon Common, Essex, close to the old-world village of South Hanningfield, she has a poultry-farm of her own; and her abilities in "the poultry line" are worthy of her Northern ancestry. From her Buff Orpingtons, which have been selected mainly for egg-production through a number of years, she has produced a fair number of prize-winners. Her White Wyandottes, all directly descended from a splendid pullet which commenced by securing a reserve card—and incidentally laying her first egg—at Redhill Show several years ago, have done much winning. But the more recent triumphs of Mrs. Rice's fowls have been with White Orpingtons; and during this last season among the wins she obtained with four different cockerels of her own breeding were second prizes at the Dairy, the Crystal Palace, Leipzig, Hanover, and Hadleigh, and first prizes at Chelmsford, Kennington, and Cöthen. She has not exhibited hens to any great extent, but she has a nice collection of prize cards, and possesses some of the best pullets in the Fancy at the present time. This year's hatchings have turned out well; and putting down eggs only from the best birds in each variety, she has over 300 chickens out, and many more due long before this note can appear. Among other breeds kept at Haylands' Poultry Farm are Black Orpingtons, Old English Pheasant Fowls, Blue Leghorns, and, of course, the Rose-combed Barred Plymouth Rocks.

## FEEDING FOR HEALTH AND EGG-PRODUCTION.

By MISS A. S. GALBRAITH.

IN giving my experience in feeding poultry for health, I wish to make it clear that this deals solely with hens kept at liberty in a trying situation. The experiments in breeding for egg-production that I was carrying out necessitated close inbreeding for several generations, and nothing is more certain than that one cannot inbreed closely for years unless the health of the stock is perfect. With a climatic situation that is a mixture of the bleakest northern moor and a baking southern heath, a soil that is a semi-liquid mudpond all winter and flying dust all summer, situated in a high-lying, wind-swept hollow, filled with fog and mist, the feeding has to be generous and nourishing and the stock hardy if eggs are to be plentiful all the year round.

There are two guiding principles which have helped me to steer a safe course. These are: First, that no healthy young creatures (and very few adults) will eat too much if every want of the system be constantly and fully supplied. The calf running by the mother's side in the open neither drinks too much milk nor eats too much grass; neither does the hen on the meadow eat too much green food, while her sister in a confined run will gorge herself on every opportunity. It is the same with all other foods; it is only the system that is starved of some ingredient needful to its welfare that has unnatural cravings or over-keen appetites. Therefore neither my chicks nor hens are ever allowed to become really hungry. Suitable food is always within reach, and appetites are always sharp.

The second principle is the natural corollary to this central fact; it is that even a slight excess of any food element, carried on steadily for years, leads to disaster in the end, either through the actual breakdown of some organ, or through a general condition which prevents the bird from resisting exposure or disease. The problem, therefore, to one living in a wind-swept, fog-laden bog, and carrying on a system of the closest inbreeding, has been how to adjust the balance so as to give the large amount of heating food necessary without overstepping the danger limit and setting up weakness or disease. It was also my object to keep birds productive beyond the ordinary two years, an important point where facilities and time for rearing many chicks cannot be found. As usual in my experience, it was the birds themselves who pointed the way, and I had but to follow to discover how to feed, so that the selected best hens have been kept in good profit up to the age of four to six years, many of the oldest laying well over 130 eggs in the year, and two-thirds of these being produced when eggs are selling at 1s. 3d. to 1s. 9d. a dozen wholesale.

Pondering upon how it came about that some birds who constantly flew over into the chicken-rearing ground, and fed with the chicks every two hours from March till October, never become fat, and produced from August until October or early November literally an egg a day each, although "old" birds, I at last recognised three points that seemed conducive to these results.

1. The ingredients of which the food consisted. The chicks are fed chiefly on wheat and oat pro-



ducts prepared in many ways, the chief favourites being whole boiled wheat, also oatmeal soaked in milk or water and baked in the oven until each grain is separate, dry, and crisp, but not over-toasted. For this last the chicks are ravenous. All meals used are generally given cooked at first, after the manner of the puddings recommended by Mr. Palmer, the ingredients being varied according to circumstances, and goats' milk being used, while some grain is given raw as well. The foods that are *never* used for chickens are rice, barley, peas, lentils, raw maize, and millet, while dari and buckwheat are only occasionally given. Prepared foods and bought "dry chick" feeds are not used, and meat meal only in prolonged dry weather. During wet weather and for the September chicks a little cooked maize is added, and as the birds approach the pullet stage barley meal is gradually introduced. For both chicks and adults I prefer heat to be given through the medium of animal fats and those grains in which the percentage of oils is high in proportion to the starch. It will be seen that there is nothing in this diet likely to over-fatten laying hens.

2. The way in which the food was prepared, a large proportion being cooked.

3. The manner in which it was partaken of, small meals being many times repeated, and there being at no time a "heavy" meal.

Three years later many of the same birds are still there, behaving in the same manner and laying, at the date of writing (June 2), from three to seven eggs a week. The most curious thing about them is their youthful appearance, not one looking a day over two years, their open-air, active life probably aiding in this.

But when everything is summed up, the beginning, the middle, and the end of it all appears to be—green food. For keeping the birds in health it is unequalled, and can be so used that even with some hundreds of birds no medicine of any description is required from one year's end to the other, and heavy layers live for years in profit without the smallest knowledge of Epsom salts, roup powders, or any other tonic or condiment, save a little common salt in winter when horseflesh is used.

If a good supply of eggs is needed in hot weather, an ample supply of juicy green food will secure it. If hens are required to moult easily and quickly, abundance of green food cooked and raw will do it, while if eggs are wanted in winter, only a liberal use of vegetables will permit of the rich and heating food needed from October to December. What is a liberal supply of green food? The birds must decide that for themselves. The quantities that I have found to answer best are, for winter, of cooked roots  $2\frac{1}{2}$  lb. to every 100 hens, with clover-chaff added up to a quarter of the bulk of the soft food as cold increases, and in addition to this a free run over good meadows, moderately grazed, and as much of raw roots as they will eat; and even with the free range they will take half a hundredweight weekly, this making 70 lb. of roots in addition to the chaff, grasses, clover, &c., to every 100 birds, or very nearly 3 oz. daily. In spring cooked nettles replace the roots until other vegetables, thinnings, &c., are available. The best method I know for hot weather is to give clover-chaff (one-third by bulk) in the soft food, then at night place an unlimited quantity of cooked, finely-chopped nettles, cabbage, &c., lightly dusted with middlings, in the runs for the birds to eat at dawn. Nettles must be finely cut, or trouble may ensue.

For summer moulters this method acts like a charm, and I have seen the egg-yield increased 25 per cent. to 50 per cent. in ten days. Fresh leaves also are used.

When all has been learnt that science can teach us, we are still in the dark as to what use the hen will make of her food. For instance, grass has a high nutritive value, yet repeatedly when other green food is withheld the egg-yield falls 10 per cent. to 30 per cent., and in ten days the birds begin to lose their brilliant colour, while swedes, especially the leaf, they will eat in quantity for an unlimited time, the egg-yield keeping high. Fattening vegetables, such as potatoes, carrots, mangolds, &c., I do not use for poultry. I mentioned rich and heating foods for autumn, but while barley, maize, linseed, and pea-meal are all given, they are used as sparingly as possible—pea-meal only twice weekly during November, and again in February, but at no other time.

In addition to warm mash once and grain once daily, every house for adults contains a box of dry meals (not grain) and clover-chaff; thus all are constantly fed, as in the chicken-run. Not one eats too much, and I have never known an appetite to flag, while sickness is practically unknown among the pure-bred stock.

## BREEDING FOR EGGS.

DISSEMINATION of information is a primary duty of agricultural authorities. Such is recognised in Australasia. The New South Wales Department of Agriculture has recently published a bulletin by Mr. G. Bradshaw, entitled "Profitable Poultry-Breeding," in which are gathered up and emphasised the results of competitions at Hawkesbury College. We quote some of the conclusions.

"One of the first things to realise," says Mr. Bradshaw, "in relation to egg-production is the fact that the first laying year of a hen's life is her best one. Fowls of the few popular breeds commence to lay at from six to eight months of age, and the successive laying competitions have confirmed the well-known fact that a flock of young hens of the above ages, no matter what part of the State reared in, will lay an average of twelve dozen eggs each.

"Many of the birds laid sixteen dozen and over, and at one or two competitions an average of sixteen dozen was made for the entire competitors; but in all these tests, when fowls died or became sick, the owner was allowed to send others to fill the place of the dead or disabled ones, so that the figures shown as the average production per hen are not actually so. Consequently, when using the laying tests as a basis for ascertaining the laying abilities of a certain number of fowls all the deaths would have to be taken into account and the replacements for such.

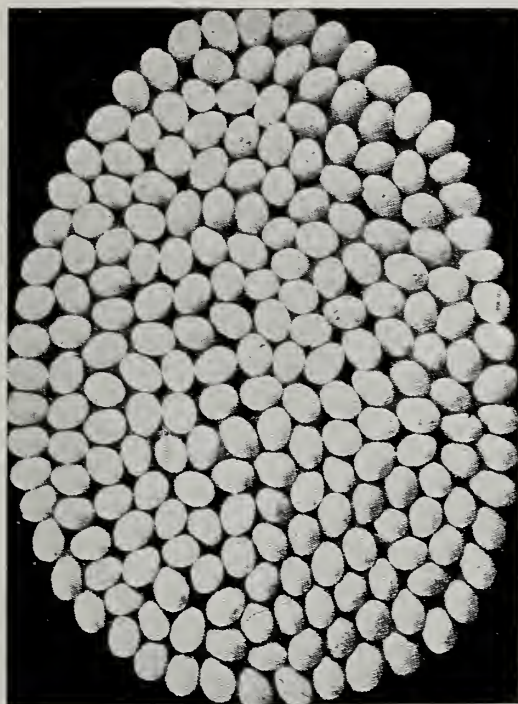
"In other words, if fifty pens of six hens each laid 60,000 eggs in the year, that would be 200 eggs for each, but, as has been the case, it may be that twelve out of the 300 died and were replaced; consequently, it took 312 hens to produce the number, which would be about 190 eggs per hen. Still, this is allowed to go on, and the average poultryman is unaware of it.



"However, those contemplating increasing and otherwise improving their stock with the view of profitable egg-production can, with pure-bred stock of a number of breeds of from six to eight months of age, with intelligent feeding, calculate on securing an average of twelve dozen from each healthy hen in the flock, and these marketed in Sydney, after paying freight and commission, should return him an average of 1s. per dozen, or a gross return of 12s. from each hen in the flock.

the College, whereas those for whom this is intended have a free range which enables the fowls to secure all their greenstuff and natural animal food in the shape of insects, while there are the house scraps and the possibility of obtaining the cheaper cereal foods mentioned earlier in this paper.

"It should be said here that at the egg-laying competitions in the respective States the feeding was of the simplest. There were no patent compounds guaranteed to make hens lay—tonics, or



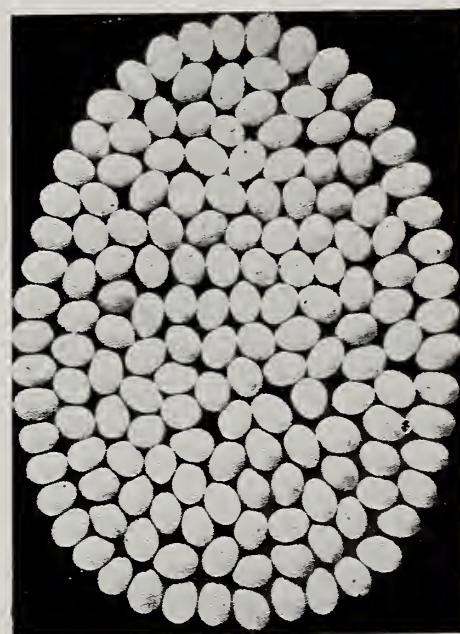
204 EGGS.

The highest for twelve months.



89 EGGS.

The lowest laying in twelve months.



145 EGGS.

Average laying in twelve months.

These illustrations show the highest and lowest laying, and the average of 186 hens at the Hawkesbury Agricultural College.

"In the foregoing estimate it will be seen I have made large deductions from the figures put up at the laying competitions. At the same time, it has to be remembered that all fowls must be, at time of commencement, from six to eight or nine months old, and when the year's laying period be over, if kept for the second year, there will be a reduction in the above from 20 to 30 per cent. But even with this falling-off there will still be a surplus over the food bill; but under no circumstances should hens be kept for profitable egg-production over two and a half years, the majority over that period being responsible for the physiological feat of eating their heads off.

"Having now seen the expected minimum egg-production of a flock of young fowls, the feed bill will be the next consideration. Already it has been shown that foods are at the present time excessively high. With all this, there have been other like seasons, that of 1902-3 corresponding with the present one. In normal years, with wheat at 3s. to 3s. 6d. and the by-products at, say, 9d. per bushel, from one penny a week to 4s. 6d. per year has been the usual debit for each hen. In the drought seasons mentioned, the feeding at Hawkesbury College averaged 6s. and 5s. 9 $\frac{3}{4}$ d. respectively, and, safely taking the former as a guide for the present, the figures show a profit of 6s. on each hen.

"In connection with that amount, it has to be mentioned that every item of food, even to the substitute for greenstuff, had to be purchased by

ought else. Wheat, maize, bran, pollard, meat, and its soup, greenstuff, and grit—these were the simple elements responsible for a number of hens in the various competitions laying 200 eggs each and over, the poorest layers at the same tests always showing a profit over the food bill.

"The foregoing are the results which may be expected. The initial work, however, is to obtain the pullets to whom the results are due."

## THE FEATHER-EATING HABIT.

By G. BRADSHAW.

(Department of Agriculture, New South Wales.)

THIS is one of the most annoying afflictions of the poultry-yard, particularly to those who are obliged to keep their fowls in confined spaces; indeed, it rarely occurs in flocks that have a free range. The evidences of feather-eating are that one or more of the flock will be seen to have bare patches, the denuded parts being usually the neck, breast, and thighs; but the baneful habit is such that instances are common where the birds have been plucked almost to the last feather, the peculiar part being that the subject usually lends itself to the cannibalistic habits of the culprit, and seems to enjoy the operation.



The causes are varied, sometimes due to overcrowding, when the fowls have to stand about all day with nothing to engage their attention; one of them may see an insect on its neighbour, and pecking it off, accidentally brings a feather with it. If this be a young, growing feather, the blood in the quill end attracts the fowl, which eats it, finds it palatable, and the habit commences. Sometimes it is due to an insufficient supply of greenstuff, but more often to a shortage of animal food. Instances have been given where the habit was due to the male bird having torn some feathers off the hen, which were at once seized on by the other birds. Unsuitable dieting is also responsible, particularly where there has been an insufficiency of animal matter in the food. In all flocks of fowls there are always one or two who tyrannise over the others, which is more pronounced at feeding-time. In pecking at them, the feathers are drawn and eaten, the objectionable habit being in this way acquired. There are also cases where it is difficult to tell exactly what induced the feather-plucking; but the great proportion of imported fowls which arrive with bare patches shows that confinement, and nothing to do in the way of scratching, is responsible for the greater number of cases.

The remedies are simple. Observation will soon determine whether one or more of the flock have the habit; if it is confined to one or two, the best plan is to get rid of them. If a number are addicted to the vice, then the runs should be thickly strewn with chaff, hay, straw, or litter of some sort. The morning food should be given of wheat or other grain, well scattered amongst the litter. This should be given by daylight, or as soon as the fowls leave their perches. Immediately on coming into the run they will commence to scratch for their morning meal, and if the quantity given is too small for their needs they will continue scratching until every grain is found. After this there should be a cabbage, lettuce, or other green food hung up in their run at a height, so as to oblige them to jump up a little for it. There should be a fair supply of meat, such as boiled liver, or any sort of meat scraps, thrown into the run at midday. This will keep them occupied until the evening meal, which should be withheld until just before roosting-time, when the fowls will eat their meal heartily and go to roost forgetful of the feather diet. A still more effective way of combating this vice is to wait until the fowls have all gone to perch, and then scatter their breakfast brain for the following morning amongst the litter, so that the fowls, when they alight off their perches, immediately commence scratching, which can be kept up throughout the day. An adoption of this method of feeding has been successful in many instances. Flower of sulphur has been much used for feather-eating fowl, the usual quantity being a tablespoonful for twenty fowls, the way of administering being to mix it in the soft food. Preventive measures for this and a number of other poultry-yard troubles will always be found best. A spare diet, but one containing a sufficiency of nourishment, including animal matter, and, if possible, a free range, are advisable. In places where litter is not obtainable the grain can be raked into the earth, thus giving the fowls occupation and exercise, lack of which is frequently responsible for the feather-eating habit.

## THE SUPPLY OF LEAN CHICKENS.

By J. W. HURST.

THE falling-off in the imports of poultry has been sufficiently persistent and notable this season to draw serious attention to the whole subject of supply and its sources. When at the commencement of the London season I found that the imports had decreased as much as 36 per cent. from the returns for the corresponding period last year, and that the tendency extended as far back as October—from which month to the end of the year the imported fowls are cold-stored for spring use—I discussed the position with Mr. Verney Carter, who found in the figures a confirmation of his argument anent the growing German appetite and its influence upon our outside sources of supply, regarding which he wrote in the November number of the ILLUSTRATED POULTRY RECORD.

Last year's early shortage of eggs has been followed by a recovery, but the consistent trend of the returns in the poultry section of import statistics does not suggest a similar subsequent experience. On the other hand, the general indications point to the strengthening of the position of English producers and the enlarging of their opportunities in this promising branch of production. We have passed the period of the early lucrative demand this year, and, in looking back, find that the usual shortage of home-grown chickens in the early months has been intensified; which serves to accentuate the contrast with the very disproportionate bulk of the later output, and more emphatically emphasises the situation indicated by the falling import figures. It is inevitable that as our competitors find nearer markets, and themselves become greater consumers, they will proportionately neglect our requirements; but the question is—Shall we producers as inevitably rise to the occasion? As a matter of fact, the opportunity is not new, but it has been more strikingly presented this year, and it remains to be seen whether the stimulus is sufficient to enable us to dominate our own markets. Our capability is undoubted, but we have hitherto been supine. Are we going to obey the Kingly injunction and "Wake up"? In the present connection the onus is upon the producers of lean chickens.

Those who are capable of rearing chickens to an age of from three to four months, and are in touch with a fattening centre, are practically assured of a reasonable return, the average of which is materially increased in proportion to the numbers brought to the required maturity during the early months. Moreover, the requirements of the fattening centres, insatiable as they are when the best prices are ruling, by no means exhaust the general and particular opportunities and possibilities. The fattening business itself is capable of very considerable development, when the difficulties are realised and efforts made to overcome them; but the unenterprising aspect of the existing position is that the rearers of lean chickens are so often unable to supply the demands of the at present limited number of fatteners. There are many abuses connected with the prevailing system of collection, there is much room for the increase of transit facilities, and there is crying need for market reforms; but all these things are remediable,



and there are organisations only awaiting the strong support of a united industry. Will English producers miss increasing opportunities because of the few obstacles in the road? The pioneer work has been done, and it only remains to join ranks and secure the very obvious advantages.

I have upon several occasions and in various places suggested that there are favourable prospects for lean chicken producers, if the work be undertaken with due knowledge of the particular needs; and it remains to particularise to some extent for the benefit of those who are unfamiliar with the details of this production—the object of which is the supply of the fattening coops. It is evidently preferable at the present time to rear for this purpose in the South-East, until such time as

it would be better if rearers could work together in groups, forwarding the produce in bulk and thus avoiding the tyranny of dealers and the reduction of hard-earned profits at the hands of collectors. There is a wide field for co-operative lean chicken-production, and the good offices of the N.P.O.S. would be as readily available in this direction as in connection with eggs; so, at least, I gather from the organising secretary, before whom I recently put my views regarding the situation and its more immediate requirements. I would suggest that groups of suitably situated small-holders give this production their serious attention, as being better worth their while than some of the branches in which it is sought to make profit in the poultry department. If it pays collectors and dealers, who



**CAPTAIN HANSEN'S BREEDING-HOUSE AT RISERUP, DENMARK.**

[Copyright.]

**This house has scratching-shed in front, and has two runs attached, which are thickly planted with fruit trees.**

fattening centres are more widely distributed, but although that locality is preferable for an all-the-year-round production, an early output is welcomed from any county that is sufficiently in touch as regards railway facilities and favourable rates. In the early months distantly-reared chickens are worth as much as those of the South-East, if of the required type and condition, and the buyer pays the carriage. The consignments must, of course, be sufficiently large to make their handling worth while, and as the early production of individual rearers is always limited, the birds maturing sufficiently with some irregularity in the matter of age,

presumably leave some share of the profit with the growers, to supply the south-eastern fatteners from Ireland, Wales, Hereford, Carlisle, and other distant districts, it does not need much argument to show that there are possibilities for co-operative endeavour; and that these could be immensely extended, with considerable economic advantage, if some method could be devised by which there could be a wider distribution of fattening centres. Nevertheless, if the ideal is difficult of attainment and must remain for future consideration, the actual of the present is sufficiently promising to encourage additional endeavour.



## THOSE CHICKENS.

By WILLIAM W. BROOMHEAD.

Chickens old or chickens young,  
 With legs plain or legs rung ;  
 Chickens with flight feathers or not ;  
 Chicks or adults, oh, drat the lot !

IT is not often that I "burst into verse," as it were; and since this is the first occasion on which I can recollect ever having done so, I trust those of my friends and acquaintances in the Fancy, who know me as I am, will pardon the outbreak and not think that I have suddenly taken leave of my senses. But after touring two or three of the shows in the early part of the season and inspecting the exhibits in the chicken classes, I feel inclined to shout: "Away with these chicken classes and give room for honesty!" For of what good are they, now that the Fancy knows what can be done? Better by far follow the hint of the Ring Committee that thrashed the question out so thoroughly for the Poultry Club, and "let's have done with it." Are these chicken classes at the early shows making for good or for evil? No doubt every man who patronises them will say, "for good," and just as readily every man will declare by all there is declarable that *his* chicken at least is a bird of the year! But how many of the exhibits in the chicken classes so far are legitimate entries for those classes, birds genuinely hatched on or after January 1, 1910?

In "Everyman's Library," edited by Ernest Rhys, there is a cover verse that is appropriate here. "Everyman, I will go with thee and be thy guide in thy most need to go by thy side." We will do the tour together. A professional poultryman, known by the more "refined" sounding title of poultry manager, is talking; and he has with him two others who are seeing how their exhibits compare with the bird which has gained first prize. We will bide awhile and listen. "Call yon a chi'en! Why, man, it's eat'n its New Year's dinner eight month sin' if it's lived a day! No; yon's no chi'en." There is somewhat of a brogue about the speech that makes one feel inclined to think that the speaker hails not from the South. The bird is taken out of its pen and critically examined, although to do so is strictly against the rules of the show. But what matters that, so long as the speaker can justify his assertion? And he does it, since it is not the first fowl he has handled. Yes; some of the "chicken" flight feathers are there right enough; but there is a hardness about the plumage that denotes to the experienced hand that the bird is nearing its adult plumage, if, indeed, it has not already donned most of it; there is a lack of those shooting feathers so general with chickens of the year at the earliest events; and the bird, since it is a female, has been laying for some time. No; this exhibit is not a chicken, all are agreed on that point, and so it is returned to its pen. But at that moment along comes the owner. "Discussing that chicken, are you? Well, it's a genuine 1910-er, *it* is. Hatched on January 5, and you can take *my* word for it. It's mine." The man with the brogue is too much of a gentleman to contradict another flatly to his face, so with a look of contempt that would wither, if such were the power of looks, he

wheels around, tells his friends to come along, and is gone. We go also.

Farther on we espy a formidable group of well-known faces. They are discussing another chicken, and again a first-prize winner. The talk is somewhat heated, maybe because they have button-holed the judge; and again the dialect is not of the South. We will join them. "That not a chicken! Why I telt thee it is, if ever there was one! Why, man, it's ringed wi' the Conference rings, and ye'll never get one of *them* rings on a bird's leg after it's three month owld." Maybe we have misinterpreted the brogue; but that matters little. Anon the bird is removed from its pen, this time in the presence of the judge and an official-looking personage. It is examined—the chicken. "Hullo! No chicken flight feathers," someone quietly remarks. "And what of that?" says another, "A bird can moult 'em and grow others before it's five months old." This is interesting; we are learning something, to be sure. "Well, I thought the rules of the show say that exhibits in these classes must not have moulted all of their chicken flight feathers?" interposes the quiet man. It *is* so, but—the judge still holds that the bird is a legitimate chicken, and adds that it would never do to pass one wearing the Conference ring! The group disperses, and everyone except the judge is quite satisfied that the bird is not a chicken "within the meaning of the Act."

More trouble! This time we arrive on the scene to find "a clear case." Here is a chicken with a Conference ring, but, ah! to the delight of the man who has spotted it, the enamel of the ring is damaged, and the bird's leg at the setting-on of the foot is swollen! Moreover, three or four of the scales over which the ring must have passed—it had *not* been cut and soldered—are decidedly damaged; hence, "this is a clear case!" Expert evidence is called in, and expert evidence is somewhat conflicting. The damage to the enamel and to the scales is carefully noted and admitted, and so is the swelling of the foot. "But," says one, and he is no greenhorn at exhibition poultry, "birds of this breed are especially heavy-boned, and at three months of age it is often a very difficult matter to get the ring on. I have myself experienced it on more than one occasion." We believe him; he speaks with the ease of one who knows. But the man with the clear case is not satisfied with that part of the verdict. He has dabbled in fancy poultry, perhaps, as many months as the other has been years at the game; but—he knows better. He would—we leave him declaring what he would do, and maybe by now he has done it or thought better of the other's words.

Another day; another show. We are still in company, and we are out learning things. "Yes, old chap, and isn't he a 'stormer.' He wins here, doesn't he, and he's going to win all along the line this season. Did you ever see such a chicken?" Really, we *must* see the bird, so, passing to the other side of the pens, we get a good glimpse of him. He is indeed a fine specimen, a cockerel this time. "But you don't mean to say that he's a 1910 hatched one?" asks someone. "What," exclaims speaker number one—and the one implies that really he has never heard such a thing as anyone daring to doubt *his* word—"Not a chicken! What do you think he is? A broody hen?" The question causes a smile on the face of



his "pal"—a really smart man this, and we must watch him. "But *is* he a chicken?" asks the same someone again. "Because if he is a 1910 bird, then he's the marvel of the age. The breed has been very backward this season. And I'm open to bet you a level hundred that he is not." Upon our word, we must not linger here much longer, or the parties may come to blows. We must pass on.

The same day; the same show. Here is a friend who will give us the truth. We will consult him. He is standing in front of a pen, smiling in a very familiar manner at its occupant. We note the number and refer to it in our catalogue. They tally. Our friend has won a first, and we congratulate him. Again he smiles, and smiles with the smile of one who is enjoying a huge joke. We are nonplussed. What *is* the joke? We look at the bird, and we ask if we may examine it. Our friend positively explodes, and it is as well that we are alone. "My boy, *you* know," he says. Aye, and we do! "But," say we, "we never thought that you would do such a thing." He has done it. He is "playing their game in their way," and he is going to continue doing it, he assures us, until he proves to them the farce of the whole thing. Maybe it is hardly a legitimate way of teaching them; but it *is* a way!

We have finished our tour. Have we gone round and lodged protests? Is *that* our business at the show? We have been around seeking information, gaining knowledge if you will, but—not acting policemen! Maybe it is hardly a legitimate way of trying to set matters aright. But who said that we are out for that? It is not our business. We are outsiders, neither judge, offender, nor defendant. We have again proved some things, and we will set them down. They are (*a*) that a fowl retaining some of its chicken flight feathers is not necessarily a bird of the year. I know this well enough, since I have a White Wyandotte cock in my yard at present which, although hatched in June 1909, still retains some of his chicken flight feathers; (*b*) that the Conference ring, although undoubtedly the best thing of its kind so far invented, is by no means perfect, and that it is quite possible to get such a ring on a bird's leg *after* it is "three month owld"; (*c*) that the rules of the show governing the judging of the exhibits, and as set down in the schedule, are not always carried out, most likely because, as I myself have experienced on some occasions, the steward or some other "official person" is not careful to see that the judge has a copy of them; (*d*) that a swollen foot and damaged scales are not "proof positive" that a bird is over age; (*e*) that some birds are especially heavy-boned, and that it is a very difficult matter to get the ring on at the proper age; (*f*) that chickens of backward breeds have a peculiar knack of their own of surpassing those of forward breeds—this I merely surmise, and have not proved; and (*g*) that there are some genuine 1909 chickens winning prizes as 1910 birds. What I cannot prove, however, beyond (*f*) is that chickens can don their adult plumage before they are five months old. Maybe I have "something to learn" in this direction.

And what are my conclusions? Simply these, that chicken classes are mostly a farce at the early shows, and that the sooner they are abolished the better for all concerned. It will never happen that all ancient chickens will be protested against

or disqualified, but it will always be found that some of them will get into the shows, maybe into the prize lists. I do not say that all the winners at the early chicken shows I have visited this season are 1909 birds; but I have my doubts about some of them, and so have other fanciers who have had the chance of seeing them. Handling is a good test, but there is absolutely no way by which anyone can guarantee that chickens he has not hatched are genuine birds of the year. Who is there that can discern between birds hatched, say, in December and those hatched on January 1? It cannot be done. We have to take the word of the exhibitor, and there is always this loophole—that exceptional specimens, genuine in every way, are liable to crop up.

## SOME RECENT SHOWS.

### IRISH SHOWS—BELFAST.

At most Irish shows this year competition is being confined to exhibitors living in Ireland, and personally I think it is an excellent move and one likely to encourage Irish exhibitors to take up the Fancy more strongly than ever. In my opinion it was no incentive to do so when the Irishmen found that year after year at their open events the pick of the prizes were won by a handful of teamsters from this side of the water. Even over here fanciers are getting somewhat tired of the so-called "pot-hunters," and the number of poultry shows in England is very much greater than that in Ireland. At Belfast Show this year sixteen of the first prizes in the forty open classes were secured by Irish exhibitors; last year only seven out of forty-one firsts were kept in the island. The recent event was certainly a £10 limit one, and it has been suggested to me that the limit accounts for the increase. No doubt it had something to do with it, but that something was very little, since I know of more than one teamster who went over with birds which he would not care to sell at the limit price. No; my candid opinion is that Irish exhibits are advancing in quality, and I am glad to see it. It only wants Irish fanciers to realise the good of keeping one or two of their best specimens in show trim, or hatching a few late chickens from their best pens, especially for their summer shows—as is done in England—to make the quality at the Irish events equal to that at any of the best shows here. I was glad to find the Brothers Galway doing well with their Orpingtons, of which they possess as good a stud as any I have seen. Mr. John Galway won a cup, a special, four first prizes, and two seconds with Blacks, Buffs, and Whites, while the only other first prize for the breed went to Mr. James Galway's Buff hen, all very typical specimens and competing in strong classes. Other successful Irish exhibitors at the Belfast event were Mrs. Cooke and Mr. H. Hegan in Faverolles (the latter taking the Irish Fanciers' Association's Cup, special, first, and second in hens); Mrs. Murland, Dr. Henry, and Dr. Prior-Kennedy in Wyandottes (Mrs. J. W. Murland's White cock winning the I.F.A. Cup); Messrs. Barriskill, Crawford, and Poag in Minorcas; Messrs. Crawford and Poag in Leghorns (the former's White hen securing the I.F.A. Cup); Mrs. Henry in Silkies; Rev. John Trotter in A.O.V. (his second prize Indian Game hen gaining the



I.F.A. Cup); Mr. Matthew Moore in Variety Bantams taking the I.F.A. and the Hamilton Cups with a Black Rose - comb cock; and Messrs. James Templeton and Hill in Indian Runner Ducks (a drake shown by the former getting the I.F.A. Cup); while in turkeys and geese, which were all "at home," Mrs. R. Allen won the I.F.A. Cup with a Bronze cock, and Mr. A. McFarland the I.F.A. special with a Toulouse gander.

#### THE "BATH AND WEST" PROTEST.

The protest lodged against a bird at the recent Bath and West Show for being over age reminds a writer in a contemporary that when the Society visited Rochester on a previous occasion—on June 5, 6, 7, 9, and 10, 1890—several birds exhibited in the classes for chickens were passed as being over age by one of the judges (Messrs. W. B. Tegetmeier and H. Dixon). I have searched the

section, too, which has been in the hands of Mr. W. Wing for the past twenty-four years, is always of the best, and fanciers can rely on their birds getting good attention while in his charge. The section was held under Poultry Club Rules, and the four silver medals offered by the club were awarded to Mr. W. M. Bell's Black Orpington cock, Messrs. Fursland Bros.' Black Minorca hen, Messrs. Firth Bros.' Indian Game cockerel, and the Bolton Model Poultry Farm's Buff Orpington pullet, this last-named bird, one of the very best chickens of her variety that I have ever seen penned at a show, also gaining the Society's special prize for the best chicken at the event—an award she well merited. There was a stronger display of Old English Game at the recent event than at Reading last year, as there was of Langshans, and Game, Orpington, and Any Other Variety chickens and geese; but the entry of Hamburgs, White



A POULTRY-HOUSE AT KOEREHAVE.

[Copyright.]

files of fanciers' papers, published at the time, to see if I could get any information concerning it, but all I can find is a mention of a third prize chicken being catalogued as "six months," and the reporter who criticised it asks if that is a genuine chicken of 1890! No doubt some chickens were passed for over-age.

#### THE "ROYAL COUNTIES" SHOW.

There was a splendid entry of poultry at the Royal Counties Show at Winchester on June 7, 8, 9, and 10. No classes were cancelled, and in the total entry (624 in sixty-one classes) the average was over ten, a most satisfactory result for a summer event. But the prize-money is on a most generous scale (3Cs. first, 15s. second, and 10s. third, with seven specials of a guinea each for an entry fee of 3s.) and tempts one to keep a few birds back for the event. The management of the poultry

Wyandottes, Orpingtons, French, and Any Other Variety among the classes for adults, and Wyandotte chickens, were not nearly so representative as at last year's show. However, taken as a whole, it was a grand turn-out.

### A SPECIAL SCHOOL FOR SMALL TENANTS IN DENMARK.

By W. A. KOCK

(Consultant to the Danish Society for Profitable Poultry Culture).

IN our country, where so many small holdings are to be found, and the tendency is to increase the number, it is natural that there should have been established some special schools for small tenants and their wives. One of the schools is



situated by Kørehave, only one and a half miles from the town of Ringsted. Beside the school buildings is to be found a model farmyard, and there is naturally a poultry farm, where the scholars can learn the practical work. Poultry-breeding, as well as book-keeping and horticulture, is included in the course of instruction.

On Fig. I. is shown the main poultry-house, situated in a small forest, where the fowls in hot weather can get plenty of shade. The house is built in two floors. On the first floor is the sleeping room, and by means of a ladder the fowl can very easily reach the second floor, where the scratching-room is to be found, and where there is plenty of straw in autumn and winter time.

Formerly different breeds of poultry were kept, but now they only breed White Leghorns. This is to suggest that every small holder should keep one of the most common economical breeds. Every year sixty pullets are trap-nested.

tion the statements and opinions of so very able and experienced a writer, for fear of the consequences, had she not referred to the use of trap-nests in the laying competition and, indirectly, perhaps, to the opinion I expressed regarding them in my report upon the Utility Poultry Club's Four Months' Laying Competition held here last month. To avoid any possible misunderstanding as to my views regarding trap-nests, I should like to state definitely that in my opinion, where breeding for a high standard of egg-production is the object in view, their use is an absolute necessity in the absence of some better means of selection and identification. At the same time, they have their drawbacks, and I am satisfied from my own experience that trapping is detrimental to the laying of *some* birds, consequently I am opposed to their use in the Laying Competitions, where the awards are given, *not to the best individual layer*, but to the pen of birds laying the highest aggregate



WHITE PEKINS AT KOEREHAVE.

[Copyright.]

Of other kinds of fowls, there are kept White Pekin ducks, as shown on Fig. II. Hens are used as brooders and mothers, and when the duckling are large enough, they are put into common large coops for the night.

## TRAP-NESTS AND THEIR USE.

To the Editor of the ILLUSTRATED POULTRY RECORD.

SIR,—The article by Miss Galbraith upon the subject of "Trap-nests and Their Use," appearing in this month's number of your journal, is, like all her contributions, both interesting and instructive, as well as amusing, and I should hesitate to ques-

number of eggs—so that there is no direct object in securing the record of each bird. This view is shared by very many breeders specialising in laying strains, and also by so eminent an authority in poultry matters as Mr. George A. Palmer, who, in an article recently appearing in the *Farmer and Stock-Keeper* upon the Laying Competition, and referring to my report thereon, said "I have before commented upon this" (the use of trap-nests) "and have shown that my favourite Black Leghorns have never done themselves credit when trap-nested." I also think I am right in saying that trap-nesting has been abandoned in the great Laying Competitions in Australia.

Miss Galbraith in her article expresses surprise



"to hear practical men object to trapping on the ground that it puts birds off laying," and goes on to say that "if it does, then the fault lies in the type of trap-nest used or in the handling of the attendant." I quite agree, a bad trap-nest or careless or improper handling must put birds off, but I go further and contend that the more restraint imposed by even the very best form of trap-nest is sufficient to frighten *some* birds, and as a natural consequence injuriously affect their egg record. In the late competition several birds were undoubtedly frightened when caught in the trap—one pen in particular, although taking a high position in the list, did not, in my opinion, do the best they were capable of on that account.

This could not be attributed to the type of trap-nest, as, strange to say, they were of the kind depicted in the photograph and described by Miss Galbraith as "An excellent trap-nest." Nor could it have been due to improper handling, as I obviate the necessity for any handling while trapping by using various coloured rings, in addition to the usual numbered metal bands, for the purpose of identification.

Miss Galbraith in her article further says, "Men find on first trapping that a pullet often ceases to lay for several days after starting, and ascribes this to the fright. The truth is that it is a *usual thing* with pullets."

I must confess this is news to me, and on looking up my records and those of the competition I find it the exception and not the rule. Amongst the competition birds only two ceased laying for more than one day after starting, and they missed three days before laying another egg. Perhaps this is a case where the *exception makes* the rule.—Yours, &c.,

June 4.

T. N. LEIGH.

## SOME FEEDING PROBLEMS.

### VII. STANDARD RATIONS.

(Continued from page 497.)

IT has been stated already that two points must be taken into consideration when making up a ration—namely, the nutritive ratio and the potential energy in the nutrients of the food. In the first place, we propose to give particulars, as far as they are available, showing the requirements on the part of the bird body during different stages of its growth and whilst fulfilling various purposes. All experiments with farm stock tend to demonstrate the fact that the larger the body the less food is required proportionate to the weight pound per pound, and therefore it is necessary to classify adult birds according to size. For simplicity this is usually done in two groups—namely, for birds weighing between 3lb. and 5lb., and between 5lb. and 7lb. This division was introduced by the New York Experiment Station, and as it answers all purposes, it is likely to be used by other experimentalists in the future. The tables we give below are those published by the above-mentioned Station, and as they are the only available figures, we publish them in full. Whether they will apply equally to this country remains to be seen, but it may be taken that they are reliable and correct as far as present knowledge can prove.

In the first place, tests were carried out to de-

termine the requirements of the body under rest conditions, or under such a state of affairs where the weight remained constant and no eggs were laid. The data were from an aggregate of fifty-two capons, averaging by different lots from 9lb. to 12lb. in weight, for 158 days' feeding, and from sixty hens ranging from 3lb. to 7lb. in weight for 150 days' feeding.

#### MAINTENANCE RATIONS.

*Digestible nutrients per day for each 100lb. live weight.*

	Total dry matter.	Ash.	Protein.	Carbohydrates.	Fat.	Fuel value.	Nutritive ratio.
	lb.	lb.	lb.	lb.	lb.	Calories.	
Capons, 9 to 12lb. ....	2.30	.06	.30	1.74	.20	4,600	1:7.5
Hens, 5 to 7lb. ....	2.70	.10	.40	2.00	.20	5,300	1:6.2
Hens, 3 to 5lb. ....	3.90	.15	.50	2.95	.30	7,680	1:7.4

It was found that hens during full lay required rations that have a larger relative content of protein and ash, and that show an increase in fuel value from 15 to 40 per cent., according to size, over that required for maintenance.

#### RATIONS FOR HENS IN FULL LAY.

*Digestible nutrients per day for each 100lb. live weight.*

	Total dry matter.	Ash.	Protein.	Carbohydrates.	Fat.	Fuel value.	Nutritive ratio.
	lb.	lb.	lb.	lb.	lb.	Calories.	
Hens, 5 to 8lb. ....	3.30	.20	.65	2.25	.20	6,240	1:4.2
Hens, 3 to 5lb. ....	5.40	.30	1.00	3.75	.35	10,300	1:4.6

It must be understood that the above are not absolute and inflexible rules, for a very much larger number of tests would have to be carried out before it would be possible to state that the figures given were definite. Their value is in the fact that they supply a definite starting-point from which other experimentalists may commence their investigations. One point must be noted, and it is that the birds have been divided into two groups, but it does not say that a bird just under 5lb., and another just over that weight, will require exactly the amount of the various constituents in the proportion given.

Further valuable statistics are given with reference to chickens and ducklings, and as we believe they will help poultry-keepers, we give them in detail.

#### RATIONS FOR CHICKS.

*Digestible nutrients per day for each 100lb. live weight.*

	Total dry matter.	Ash.	Protein.	Carbohydrates.	Fat.	Fuel value.	Nutritive ratio.
	lb.	lb.	lb.	lb.	lb.	Calories.	
For the first 2 weeks .....	10.1	.5	2.0	7.2	.4	18,800	1:4.1
From 2 to 4 weeks of age ..	9.6	.7	2.2	6.2	.5	17,730	1:3.4
From 4 to 6 weeks of age ..	8.6	.6	2.0	5.6	.4	15,640	1:3.3
From 6 to 8 weeks of age ..	7.4	.5	1.6	4.9	.4	13,780	1:3.7
From 8 to 10 weeks of age ..	6.4	.5	1.2	4.4	.3	11,680	1:4.3
From 10 to 12 weeks of age ..	5.4	.4	1.0	3.7	.3	10,000	1:4.4

#### RATIONS FOR DUCKLINGS.

*Digestible nutrients per day for each 100lb. live weight.*

	Total dry matter.	Ash.	Protein.	Carbohydrates.	Fat.	Fuel value.	Nutritive ratio.
	lb.	lb.	lb.	lb.	lb.	Calories.	
For the first 2 weeks .....	17.2	1.6	4.0	11.2	1.4	34,180	1:3.7
From 2 to 4 weeks of age ..	17.0	1.5	4.1	10.1	1.3	31,900	1:3.2
From 4 to 6 weeks of age ..	11.2	.8	2.7	7.0	.7	21,000	1:3.3
From 6 to 8 weeks of age ..	8.0	.6	1.7	5.2	.5	14,940	1:3.8
From 8 to 10 weeks of age ..	7.0	.5	1.4	4.7	.4	13,030	1:4.1
From 10 to 15 weeks of age ..	4.6	.3	.9	3.2	.2	8,470	1:4.1

After discussing the analysis of the different foods employed for poultry-breeding in this country, we will give rations, based on the above figures, for use at different seasons of the year and according to the special requirements of the various classes of poultry.

(To be continued.)



## THE BRONZE TURKEY.

TO give it its full title, this variety of turkey is the American Mammoth Bronze—American, because it was originally bred from the North American wild breed, although, among the best authorities, it is generally considered that the Mexican was the progenitor of the common domesticated turkey; Mammoth, because it is, if we may be allowed the term, the elephant of the poultry world, certainly by far the largest of the domesticated varieties of turkey, and larger now in its tame state, when bred for the show-pen and special market requirements, than when it is found wild; and Bronze, because that is a very good description of its general colour. But, since fanciers and others in this land prefer a short title, this variety is commonly known by its colour only—we omit the country of origin and any reference to size. With us, turkeys must be big!

There is, it might be mentioned, a "home-bred" species of turkey with which the Bronze can be easily confounded, or *vice versa*. We refer to the Cambridge; but since this latter variety, which was originally of the bronze shade of colouring, is now rarely if ever found in an absolutely pure state, we can put it down as extinct. The Cambridge, owing, probably, to climatic influences, and perhaps to the fact that often enough these birds are bred from before they are fully matured, deteriorated in lustre and size; hence, when the American turkey was introduced over here, breeders of the Cambridge crossed the two. There is now practically no difference between them; in fact, to distinguish the one from the other would require a very experienced eye.

The chief point to aim for in all varieties of turkeys is type, which, according to the Poultry Club's Standards, counts as thirty of a possible or ideal hundred. Then follow weight and colour, each twenty-five points, with head and wattle ten, and legs and feet, and condition five each. Any deformity in an exhibition bird, such a thing as a wry tail denoting weakness of constitution, or a crooked breast-bone is a serious defect, as, too, is lack of weight, the weights for the different varieties being specified in the standards to which we have referred; hence it will be seen

that even in show specimens utility properties are kept well in view.

It is hardly possible in these brief notes to describe fully the standard colouring of the Bronze. Suffice it to say that the chief colour of the cock is black with a brilliant bronze lustre, the primaries of the wings being pencilled across with bars of white or grey, and the tail ending with a wide edging of dull white or grey. The plumage of the hen is similar to that of the cock, although the colouring is not so brilliant nor the markings so clearly defined.



BRONZE TURKEY COCK.



## NOTES FROM ABROAD.

### Movement of Eggs in the Nest.

It is well known that a hen is constantly changing the position of eggs in the nest, and an illustration is given of this in a recent number of *L'Union Avicole* by M. C. Wauters, who shows by photographs and drawings the variations day by day. No uniformity of movement can be traced. Of thirteen eggs, No. 1, which started in the top row, never again returned to that position during the entire time of hatching, whilst No. 13, which was in the bottom row at first, only got there once.

### New Zealand Laying Competition.

Exchanges report that the fifth Laying Competition at Lincoln College terminated on March 31, and is another triumph for Leghorns, especially Whites. All the first twelve pens were of that breed, and eleven were of the Whites. The records of the first six pens, all White Leghorns, are as follow: (1) Mrs. Mills, Dunedin, 1,371 eggs, average 228; (2) Mr. G. H. Robinson, Merivale, 1,341 eggs, average 223; (3) Mr. A. R. Cameron, Napier, 1,328 eggs, average 221; (4) Messrs. Willis and Sons, New Brighton, 1,291 eggs, average 215; (5) Miss Hearfield, Addington, 1,287 eggs, average 214; (6) Messrs. Hawke and Shaw, Papanni, 1,276 eggs, average 212. The competition extended over twelve months, and the lowest number produced by the winning pen in any one month was 55 in March.

### Australian Laying Competition.

At the Queensland Twelve Months' Competition, held at Gatton, which also concluded on March 31, the White Leghorns came out on top, the four first pens being of that breed. The results were as follow: (1) Mr. A. H. Padman, total 1,532 eggs, average 255; (2) Mr. P. Aitken, total 1,459 eggs, average 243; (3) Mr. J. Holmes, total 1,400 eggs, average 233; (4) Mrs. McKay, total 1,379 eggs, average 230; (5) (Silver Wyandottes), Mr. J. Green, total 1,375 eggs, average 229; (6) Mr. A. Smith, total 1,330 eggs, average 222. The last-named as well as the first four were White Leghorns. The remarkable feature of this competition was that from twenty pens, or 120 hens, 24,670 eggs were obtained, or an average of 205.6. Only in one lot was there a month in which no eggs were produced.

### Death of M. Louis Heurotin.

Poultry-breeders in the Liège district are mourning the death of M. Louis Heurotin, one of the most active members of *L'Union Avicole* of that city, of which he has served on the Committee for several years. At one time he had charge of the poultry establishment of Madame Verstraete-Delebart, and was recently head of an appliance and poultry supplies business on the Boulevard d'Avroy. His interest in both exhibition and utility poultry was very great indeed.

### Mosquitoes as Disease Carriers.

The business end of a mosquito is sharp. A writer in the *Australian Hen* puts down many losses in poultry to that predatory insect.

Now, the root of all our trouble is the mosquito, and until we try and get rid of this pest we will always have trouble. He causes more deaths than people give him credit for. He will have a feed off a bird which has been ravished with ticks and come direct from them to your place or mine and have a feed off your birds, and at the same time inoculate our birds much the same way as bees inoculate plants such as melons and paw paws, &c.

### Speculating in Eggs.

The Cold Storage Companies of New York State are evidently looking forward to a profitable time ahead, with prices as high as last winter. It is reported that there are now in the warehouses of New York and vicinity 1,119,000 cases of 30 dozen each, upwards of 400,000,000, as against 615,000 cases a year ago. The result has been a stiffening of the spring prices, and whether the final result will be satisfactory remains to be seen. It would appear, however, that the advance of food prices is likely to be maintained, owing to increased demand—and other influences.

### Egs.

Theodore Roosevelt tried to introduce reformed spelling, but failed. It was harder than winning the Presidency of the United States. But the idea is not dead. Here is one of the latest developments. Respecting a Spelling Reform Banquet in New York, a report says:

Reformed spellers have cracked the g off egg, and someone told the professor that no respectable hen would lay an egg with only one g; but he was of the opinion that as the hen made her living scratching with a leg with only one g, the objection was absurd.

As *Poultry Husbandry* says, "There might be some difficulty about eating an eg—it would scarcely taste right." Such is prejudice.

### Electrocuted Eggs.

Some years ago we tried an experiment upon eggs by passing an electric current of a high voltage through them, but some seemed to thrive upon this diet, as they hatched strong chickens. Hence we are interested to read what is stated by an American electrician, who explains the loss of palatability in stored eggs:

This is because the eggs are slowly frozen to death. Eggs should be killed the same as animal food, and the proper way to kill them is by electrocution. Put an end to the life of embryo chickens by sending 500 volts of electricity through the shell. Eggs thus electrocuted preserve their natural fresh taste, and do not lose it even by long retirement in storage. There is so much life in the ordinary fresh-laid egg that it takes 500 volts to kill it.

Here is a new field for observation, both as to the effect upon germs of a modest current, and how much is required to kill them.

### The Sexaphone.

We have not heard much of this instrument for some time. But it has broken out across the Atlantic. As it gyrates just as freely with a boiled egg as with one that is new-laid, doubt with a big "D" follows its operations.



# THE POULTRY-KEEPER'S OTHER INTERESTS.

By "HOME COUNTIES."

*Author of "The Townsman's Farm," "Poultry Farming: Some Facts and Some Conclusions,"  
"The Case for the Goat," "Country Cottages," &c.*

"Poultry should be only one part of the stock."

—*The Secretary of the N.P.O.S. in the "Cyclopædia of Modern Agriculture."*

## THE PROMISED IMPORTATION OF GOATS.

Once more the importation of goats from the Continent has been put off owing to the prevalence of contagious disease in Switzerland. There is every reason to believe that at the earliest possible

## INSURANCE OF SMALL STOCK.

There is one direction in which the goat-keepers of the Netherlands are able to give us points; that is in the insurance of their goats. This is largely done by co-operative effort. It is possible, I be-



SOME OF MRS. TOHL'S CELEBRATED MILK GOATS.

[Copyright.]

moment the Board of Agriculture will facilitate importations. It is obvious, however, that there is nothing to be gained in the long run by rash attempts to get new blood from the Continent.

## WHERE THERE ARE 165,000 GOATS.

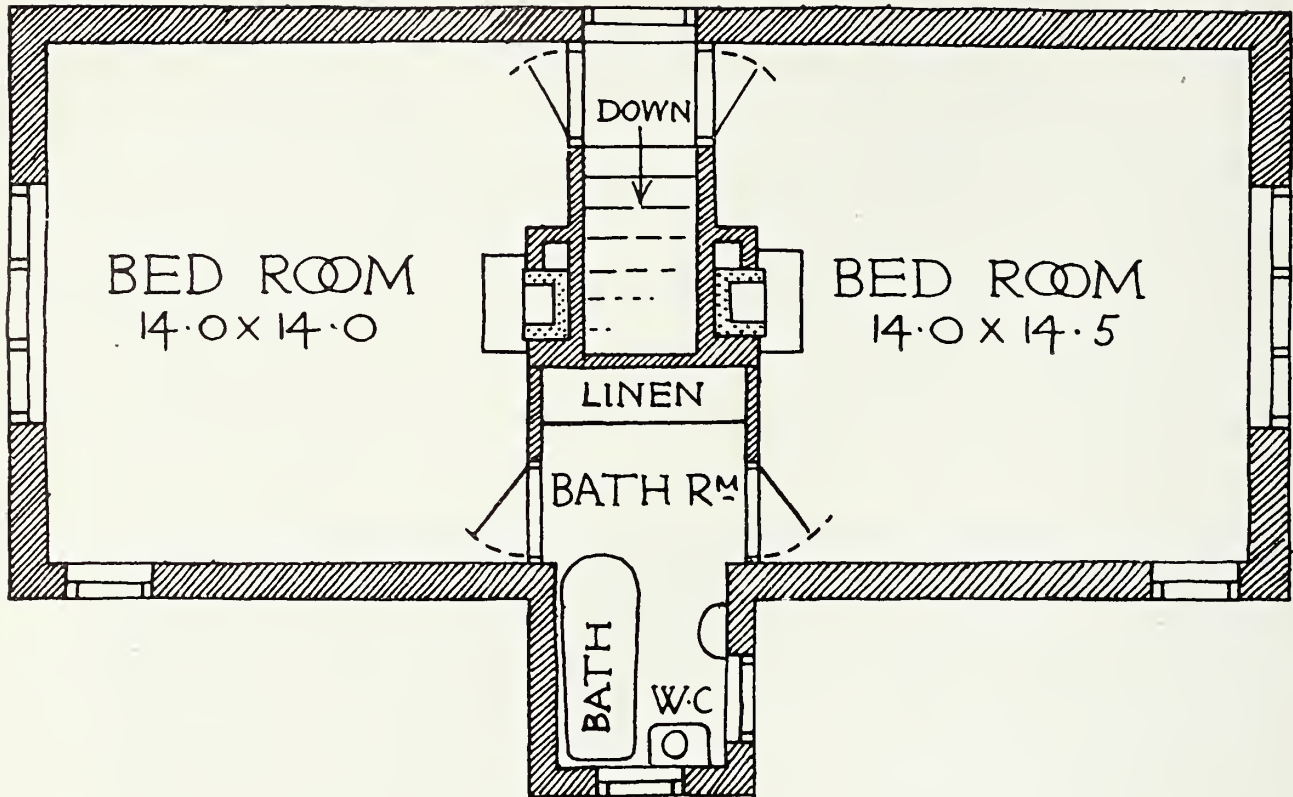
Since I wrote last I have been over in Holland, and have been struck by the number of goats kept there. I see from the national reference-book that the total number is 165,000. I did not have an opportunity of closely inspecting any animals. Such as I did see did not seem to be of special value. They were somewhat small, but they may have milked very well for all that. I have at present a little goat, for which I gave only half a sovereign, which has been giving two quarts, and seems likely to be some time before it drops below three pints a day level.

lieve, to insure goats in an insurance company called the County Live Stock Association, having its offices at York, but I have no experience of this office, and I do not know the terms it asks. If the rates are low the insurance might be well worth while, for if goats do not often die suddenly—they do so now and then—they are subject to accidents owing to their adventurous disposition, and they sometimes have fatal disagreements with other animals.

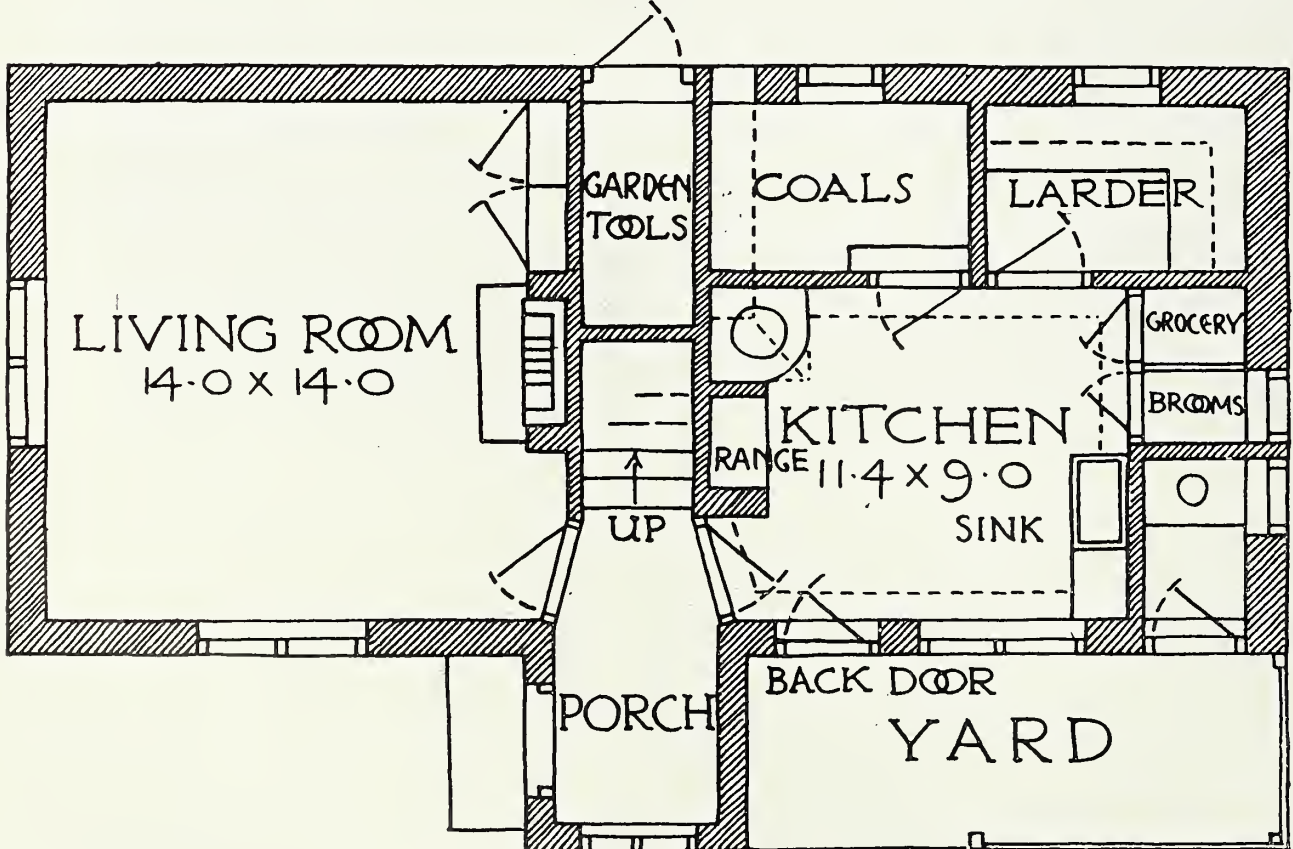
## EWES' MILK BUTTER.

I have spoken once or twice about the usefulness of sheep as milk producers. I now see that it is stated in a Consular Report from Holland that butter is made in some districts from ewes' milk, and not only made but exported. I wish some public-spirited person would do something to encourage people in rural districts, where milk is often so scarce, to try ewes' milk.





FIRST FLOOR PLAN



GROUND FLOOR PLAN

PLAN OF A £200 COTTAGE (SEE NOTE ON PAGE OPPOSITE).

[Copyright.]



## CREEPERS VERSUS WASH.

A month or two ago I suggested to any poultry-keeper who found himself in an ugly brick-house, in a stud and plaster and tiles country, that he could improve the look of things very much by washing over the bricks with lime and copperas. One objection that some readers might see to this advice is that houses often have creepers on them. The results of an experiment I have just tried may therefore be of interest. The plants were roses and ampelopsis veitchii and cherries. The ampelopsis and the roses had reached the gutter. When I took advice on the subject, one man dissuaded me. He was sure the strong wash (two coats were necessary) would kill the plants. The other said that I must look at the improvement from the architectural point of view, and not from the horticultural point of view. At length I resolutely cut my roses heavily back, and decided to let the ampelopsis take its chance. The wash was applied early in February. When the first coat was put on, the stems of the plants looked so prominent against the yellow wash, and it was so difficult to get the wash in behind them by what painters call cutting, that I gave the order to fling the wash on the plants, equally with the bricks. In the case of the ampelopsis my instructions were taken too literally by the lad to whose share this piece of the wall came, and as a result the creeper was absolutely out of sight in thick wash when the stuff had dried.

## SUCCESS OF A DRASTIC TREATMENT.

To take the rose first, it was bursting into bud, being on a south wall, when the wash was applied, and for a week or two I certainly thought I had killed it. But at length a shoot appeared at one or two points, and since then the number of shoots has steadily increased, and now when I return home after a holiday I find that, except for being late, it is absolutely none the worse for the severe treatment it has had. There may be fewer flowers owing to the heavy pruning, but the plant never looked healthier in its life. As for the ampelopsis, it was a long time before there was any sign of life, and I was quite sure at one time that it was dead. To my gratified surprise, however, little red points have pricked their way through the caked wash, and their number has grown so that there is no doubt that the plant is all right. Indeed, on examination just before writing this, I find that the whole plant is full of shoots. The leaves will come late, of course, but there is no doubt that the plant is perfectly sound from the bottom to the top. In fact, I believe that ampelopsis, roses, and cherries are improved, if anything, by the drastic treatment they have had. Their insect pests have certainly had a bad time. The moral of all this is that the presence of creepers need never deter anyone from washing the walls either of a yellow-wash house or of a brick-house, if its appearance is likely to be improved by this treatment.

## INDIRECT PROFITS FROM BEES.

Not long ago I referred to the advantages gained by the owner of fruit trees who kept bees. I have just been reading some very remarkable data on the subject in the new Proceedings of the Royal Horticultural Society. The writer enveloped gooseberry and currant bushes in muslin before the blossoms opened, and has compared their produce with that obtained from bushes which bees were

free to visit. For purposes of easy comparison the bushes were cordons. A photograph shows a protected gooseberry bush with only six gooseberries, while two adjoining bushes yielded respectively 151 and 167 berries. An isolated black currant bush produced two berries against an average yield on the part of its neighbour. The experience of several fruit-growers is reported by the investigator. A striking illustration is that of a fruit-grower in the West of England, who, after the cold spring of 1907, had an abundance of fruit due to bees, while orchards in the immediate vicinity had scarcely any fruit at all. In a season when apples were quite scarce in the district, this man gathered 150 bushels off two acres, a first picking and scarcely half the crop.

## A CHEAP COTTAGE.

I have great pleasure in reproducing on the previous page, by the courtesy of the distinguished architect, Mr. Randall Wells, a most interesting plan of a simple cottage. I say "most interesting" because the way in which a large space is obtained without waste and with a small expenditure is noteworthy. Nothing tries the quality of an architect more than the planning of a cottage, especially a cheap cottage. I imagine that this cottage can be built for £200, or in favourable circumstances even less. It will be seen that, for a poultry-farmer with no family, the accommodation is ideal. I shall venture to give Mr. Randall Wells's address: Trinity Street, Hastings. Mr. Randall Wells was, of course, the winner of the £100 prize at the first Cheap Cottage Exhibition. It goes without saying that it would be an easy matter to expand the cottage.

## THE COMFORT OF "KLOMPEN."

I wonder whether I have ever in these notes recommended wooden shoes to poultry-keepers? I have just bought my second pair—klompen, not sabots. Klompen is, of course, the Dutch word, but there is practically no difference between the wooden shoes of the Netherlands and of France. I have not bought my second pair because the first wore out, but because they were accidentally burnt. Wooden shoes could not have maintained themselves in competition with leather as they have done had they not had merits other than cheapness. The chief advantage I find is the ease with which they can be put on and taken off; their cosiness is also a point in their favour. In the third place, while one is gardening they do not press down the soil in the way that the narrower and shorter boots do. There is some little knack in wearing them. They seem most comfortable when one walks slightly on one's heels. Well-to-do men in Holland and France would not keep wearing klompen if they were not comfortable; and provided a decent fit is got, they are first-rate things, in my opinion. I think I paid 1s. 3d. for my pair. Anyhow, the cost is small.

## HOW TO GET THEM.

I absolutely refuse to give the name of a manufacturer. I once did so in print, and the result was that the poor man's life was made a misery. He was a person in humble circumstances, and neither he nor any of his friends seemed to read English effectively, and postal orders flowed in on him along with absolutely undecipherable addresses to such a degree that, in despair, he put the whole of the communications into a box and went on quietly with



his business! I discovered what had happened when I got a friend to go to see why he was not executing his orders. He simply refused to have anything to do with a foreign trade which involved so much headwork! And what has happened to those postal orders I have not the remotest idea. The best way, however, is to buy one's klompen or sabots for oneself—that is, to get measured, and that can best be done when the poultry-keeper takes my advice and tries a holiday in France, Holland, Belgium, or Denmark.

#### ANOTHER STORY.

While I dictate the foregoing note a friend who is present is bursting to tell me a story, and I find it as follows: When he was in Holland he went to a shop to buy a wooden bowl, and found that the man in charge had had the same trouble as my friend of the postal orders. English and American visitors, particularly Americans, came into his shop in such numbers in the summer time to buy klompen, and the trying on was such a business in the narrow

## A SOUTH CALIFORNIAN OSTRICH FARM.

By S. FRANCES LATIMER.

WE have to-day visited an ostrich farm in lovely, balmy South California, situated between Los Angeles and Pasadena, a farm that contains 200 gigantic birds. The guide informed us that some seventeen odd years ago fifty birds were brought from South Africa by Mr. Cawston, the proprietor. Of these, several died on board ship, others after their arrival, and a few only eventually became acclimatised. The latter bred and multiplied. Other birds were added, and cross-breeding, the fine climate, care, regular and good feeding brought these farm ostriches to be the superiors of the wild birds which have to struggle for existence on the African deserts.

The first and largest of the corrals contained the Kindergarten. Fine children it held of various ages, continuously on the move, after the restless



A SCENE IN THE GROUNDS OF THE CAWSTON OSTRICH FARM.

space of his shop, and took up so much of his time, that he had to shut down the klompen part of his business absolutely and concentrate on articles which appealed to local buyers. I should add that I rather fancy there are klompen makers and klompen makers. My second pair do not fit so well as my first pair. In things which depend so much upon the skill and aptitude of the maker there must be some variation. Which all goes to support what I say, that the wise reader will only buy his or her wooden shoes after a careful try-on.

manner of youth. "The boys wear black coats, you will perceive," said our cicerone, "the girls grey, which undeviating uniform is an assistance to strangers in determining sex, for the females run the males close in size. The babies are round that corner the same side." Three had recently been hatched out of a sitting of sixteen. "One dropped off, and then there were two!" Two perky little ones, of ten days old, with funny, stubbly little backs, looking as if tousled horse-hair replaced the soft down of the callow period common to



most birds, but the bodies such perfect ovals that, tuck in the head and legs, and presto! one perceives they could again adroitly refit into their vacated, big, creamy-hued shells. The parent birds, we learnt, concern themselves little about their young after their advent. Possibly the forty days they are engaged over the hatching satisfies their paternal and maternal instincts. At any rate, in this farm they are brought up by hand by an attendant, as they require to be dealt with judiciously to tide over the early months of babyhood. For the first four days they are unfed, after which they are allowed alfalfa, and they pick up gravel to aid digestion, being busily employed thereat as we surveyed the couple, with the adroit alacrity of a robin picking up worms out of the newly-turned soil in our northern lands. Seemingly sturdy as are their little frames, they have to be sheltered at night even in equable California, for damp or chill would endanger them at this early period of growth.

In the marital relationship the ostrich sets a good example to all classes of society. It is constant in attachment, never attempting, but resenting divorce. The mate shares the long-drawn-out hours of incubation with the hen, the wife of his choice. At the age of four the male bird seeks his spouse, and, having found one to his liking, sticks to her and to her only; and when she presents him with the eggs that are to carry on their kind, he does turn and turn about in the sitting, and sometimes extra innings, the good lady being exercised at the outset by the laying of an egg about three pounds in weight, each equal to thirty chicken eggs.

Alternate days until thirty days give them a store worthy their devotion to the further requisite weeks demanded for the bringing into being. There is no billing and cooing and gathering up of material for nest-making. Such a big nest it would have to be! Instead, in their native state the birds scoop out the warm sand and deposit the eggs therein; and at this Pasadena breeding corral, on a corner of the bare ground, lay an uncompleted heap which, when the tally was completed, the huge patient birds would start on, without the doing of much beyond the covering of the giant eggs with their giant bodies.

As they sit in the open, readily discernible to the naked eye, in the clear air of their native regions, Nature has provided them with suitable coloured feathering. The grey of the female for the daylight, the black of the male for the night hours. But on this our visit, Mr. Washington had obligingly not tarried for the shadows, but was lolling on the eggs that good Mrs. Washington had abandoned, and was stretching a long-drawn-out neck and taking a gentle side roll for relaxation, whilst Dame Washington was easing her cramped legs by a stroll round the corral, congratulating herself, doubtless, on being early off duty.

These long-necked birds bolt the most extraordinary things, such as iron and steel nails, gimlets, tennis and other hard balls, jewels, and stones. The gardener took from a basket oranges, of which fruit they are exceedingly fond, and decorously bidding the previously quiet but now eager birds to wait their turn and "*Place aux dames*, let Madame have the first," his hand scarce neared the gaping beak, protruding ready, than gulp, and in the long



"CLIPPING THE PLUMES."

thin neck the orange showed the way down, gone ere a lady watching could exclaim, "She does not even seem to taste it, though we see it going." "Why, certainly," responds our gardener, to whom the remark seemed not unexpected, "it's a lengthened-out enjoyment. You remember Mark Twain and the giraffe."

Plucking season, we were told, is announced in the local papers, and visitors throng for the interesting event, which, in reality, is a cutting of the larger plumes and only a plucking of the smaller ones that are ready to fall. There is no pain in the removal, as the large feathers are also ripe for falling, but the birds resent the initial hand'ing, and angry ostriches are dangerous, as they kick with a power and directness well known to denizens of the desert.

The oldest ostriches stand eight feet high and weigh three hundred pounds. The feathers of the male are in some respects superior to those of the female, harder in texture, retaining curl longer, and are capable of taking a beautiful glossy finish. On the live birds they are not the long, thick plume we seek in purchase, but are single, flat and somewhat unusable-looking. Three or more of like length and width are placed together, and other methods of treatment are adopted to obtain the richness, fluffiness, and grace that render them so attractive for personal adornment.



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## BIBLIOGRAPHY OF POULTRY.

COMPILED BY EDWARD BROWN, F.L.S.

*Compiler's Note.*—With the object of securing as complete a list as possible of Poultry Books, it is proposed to give from time to time particulars as to such as are known. My own library embraces nearly 350 volumes on this subject, but there must be many not contained therein. I beg respectfully to request the kindly co-operation of owners of books not named, with a view to making the list exhaustive. In sending particulars I request that the following be stated: (1) Full title, and sub-title, if any; (2) Author's complete name, with any information respecting the writer; (3) Place of publication and name of publisher; (4) Date of publication, if given; (5) Number of edition; (6) Number of pages and size of book; (7) If illustrated; and (8) Whether in paper or cloth. Acknowledgment will be made of source of information. The books marked with an asterisk I have not been able to verify, and fuller details will be welcome both as to books and authors.

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(To be continued.)

## NOTES FROM CORRESPONDENTS.

### YORKSHIRE NOTES.

By F. W. PARTON.

A NOVEL and interesting feature of the forthcoming Agricultural Show, which will be held at Leeds on July 26, 27, and 28, will be a small model poultry plant, at which there will be exhibited a range of breeding-pens containing suitable specimens for utility poultry-keeping. In view of the great amount of attention that is being bestowed upon intensive methods of poultry-culture, especial interest is attached to the laying out of a small garden plot illustrating a plan of particular benefit to those whose space is limited. A modern poultry-house is placed in the centre of a garden, the latter being divided into four equal portions. The Show authorities, being unable to give permission for breaking up the turf, have arranged to erect a signboard in each run, denoting the crop that might be cultivated there. One plot will be labelled "grass," another "potatoes," a third "cabbages," a fourth "winter greens." This is to indicate that the fowls would have the use of one-fourth of the garden for a few months, each plot being used and cropped in turn, thus giving benefit to both fowls and garden. A plan of this description would enable the ground to be comparatively heavily stocked. The great demonstrative value of this small model garden plant should prove very beneficial indeed to those interested in the subject, for while this system has been advocated for some time past, it is, so far as I am aware, the first practical demonstration to be given at a poultry show.

As in former years, demonstrations in cramming fowls, in dressing and trussing, in testing eggs, and in various other branches of poultry-keeping, will be given each day of the Show. It is no exaggeration to say that these demonstrations have in years past proved to be among the most attractive features in the whole Show. This is proved by the fact that the demonstration tent is crowded, sometimes inconveniently so, throughout the day. Since the poultry demonstrations were inaugurated three years ago, there has been a marked improvement in the preparation of table-poultry throughout the county of Yorkshire.

The Yorkshire Show is among the most important fixtures in the North of England. Yorkshire and Lancashire abound in fanciers; probably there are more poultry enthusiasts there than in any other half-dozen counties in the country.

The hatching and rearing season of 1910 has been an eminently satisfactory one. In some parts of the county it was inevitable that there should be some complaints, but, taking the county as a whole, the eggs proved remarkably fertile and the chickens hatched therefrom strong and vigorous. The warm weather that has been experienced during the last few weeks has materially assisted in the chickens' development, and in all parts of the county large flocks of cockerels and pullets are to be seen.



There is one particular point the importance of which many Yorkshire poultry-keepers fail to realise—namely, the separation of the sexes. This is really an extremely important matter, and immediately the cockerels can be distinguished from the pullets, the sexes should be divided, for only in this way is it possible to achieve the best results. When the cockerels and pullets are allowed to intermingle, neither thrives so well; the cockerels annoy the pullets by their too persistent attentions, besides which they are constantly fighting among themselves, sometimes causing one another grievous injury.

## NOTES FROM WALES.

By A. T. JOHNSON.

**I**N spite of a good deal of rain, the weather during the later part of the spring was all that a poultry-keeper could desire. The chickens and other young stock soon made up for the time they lost during earlier days, with the result that few seasons could boast of a better turn-out than this one. On the whole, too, there has been a noticeable attempt to get the birds hatched earlier, so that we may expect at least some return from the pullets before winter is fully come. Eggs began to fall off in supply early last month in many districts, the retail price being as high as one penny each—a phenomenal figure for such an early date. Even in the Bangor, Llangefni, and Llanrwst markets, which are among the cheapest sources of supply in the northern part of Wales, one had to pay at the rate of one shilling for fourteen and fifteen for only fairly reliable qualities. Chickens were also as high as 5s. 6d. and 6s. per couple—and they were poor ones at that. Ducklings were very nearly non-existent, if we exclude chilled specimens and those sent in from the big English wholesale markets. There is obviously no lack of encouragement for Taffy. It does not call for any great exercise of intelligence to discover when eggs and poultry should be produced to get the best prices at the lowest cost of production. All around the coast and in most places inland the influx of visitors, which will continue until October, creates an enormous demand, with which the local supply has, so far, been impotent to deal.

The summer show season opened at Blaenau Festiniog on Whit Monday, the event being in every way a success. This month we have a promising show coming off at Old Colwyn on the 13th inst., and there are a long list of fixtures for August. Although the "Wyndham Trophy" has been offered to all shows which will adopt Poultry Club Rules, the requests for that cup have so far been few. It is to be competed for at Mold, Towyn, Vaynol Park, Llangollen, Hawarden, and Machynlleth, but it is hoped that more show committees will apply for it before these notes are in print.

It is gratifying to learn that the Welsh Northern Fanciers' Association (late Vale of Conway and District) have practically paid off all prize-money due to winners at the big Llandudno Show last

summer, which was wrecked by a storm. Much credit is due to the committee for sticking so bravely to a task that would have made less enthusiastic and, perhaps I may say, less sincere fanciers flinch. Mr. G. E. Cragg, of Rocklands, Rhos, Colwyn Bay, who is still acting as hon. secretary, deserves especial mention for the manner in which he has tackled his uphill work.

## IRISH NOTES.

By MISS MURPHY.

**S**INCE I last wrote weather conditions have wonderfully improved, and turkeys and late chickens have a great advantage over the earlier-hatched birds. Turkey-rearing is now in full swing in the South. Cork heads the list as a turkey-raising district, the return for 1908 giving 104,390 birds as having been hatched in that year. Wexford is next best with 54,691, Ki'kenney a good third with 42,981. It is noticeable, however, that the number of young birds hatched is low in proportion to the number of adult birds kept. The official return credits Cork with 19,000 stock birds, Wexford with 11,832, and Kilkenny with 8,131 adult birds.

The enormous quantity of green food consumed by turkey chicks is known to every rearer. For some years I have discontinued mixing the green food with the meal food, as I find that by so doing the birds eat more of the substantial fare and are then ready for the greenstuff. I find turkeys enjoy chopped chives better than anything else that can be given them, and that they are beneficial to the birds there is no doubt.

Many of the Southern shows are this year giving classes for Sussex fowls. Kilkenny heads the list with classes for each of the three varieties, Light, Red, and Speckled. There can be no greater tribute to the utility qualities of the breed than the way it has been taken up here. Only a first-rate utility breed will ever become popular in Ireland, as those who go in for the purely fancy side are few in number, and breeders have to depend on sales to farmers more than on sales to exhibitors at fancy prices.

Two cases of wholesale poisoning have recently come to my notice. In one case a hen was sent, one of some twenty-four that had died on one farm. On examination the bird showed every symptom of having eaten something poisonous, and the contents of gizzard and intestine were quite red. An examination of the place where the fowls were kept revealed the fact that the bird had gained access to some red lead, and this was the cause of the disaster.

In the second case several finely grown chickens were sent for examination, and they, too, showed signs of having been poisoned. In this case tar had been too freely used in order to scare away rats. As both tar and red lead are in fairly frequent use, precautions should be taken to keep them out of reach of the fowls and to apply the tar in such a way that it cannot contaminate food or drink to such an extent as to cause serious damage.



# MARKETS AND MARKETING.

## WEEKLY REPORTS.

### Week Ending May 21.

Owing to the King's funeral, trade was very quiet. Values, however, were well maintained owing to many producers withholding supplies in the expectation of meeting with a slow demand. Prime Surrey chickens realised good values, as also did Aylesbury ducklings. Goslings met with a favourable reception.

The London market for foreign eggs remained unchanged. Business was not at all good, the trade being much affected by the heavy arrivals from Russia; shippers lost considerably. During the week ending May 14, 326,891 great hundreds of eggs were imported into this country, as compared with 247,171 for the corresponding period of 1909. The demand for Irish eggs on the Liverpool market was unsteady, prices varying from 6s. 9d. to 7s. 6d. Duck eggs realised from 8s. 9d. to 9s. In Manchester the market was affected by holidays. Irish eggs were slightly dearer, as also were English. The demand in London for English eggs was steady, with a decided upward tendency in values.

### Week Ending May 28.

The supply of English chicken was slightly more plentiful, but trade had hardly recovered as much as was expected. Prices, if anything, ruled slightly lower. The best qualities sold readily, but indifferent birds met a slower demand. There were a few petits poussins which realised from 1s. 4d. to 1s. 6d. each. The trade for foreign eggs was slightly better. In this branch demand ran stronger for best goods. The imports of foreign eggs for the week amounted to 356,623 great hundreds, as compared with 388,061 for the corresponding period of 1909. The value of poultry received amounted to £3,971 and game £13, as compared with £4,738 and £773 respectively in 1909. The English egg trade was firmer, demand being good for the first grade.

### Week Ending June 4.

Although trade during the week was not up to what it usually is, the demand for good English poultry was greater than the supply. Ducklings were much more plentiful, and ruled slightly cheaper all round. Foreign poultry was in quiet demand. The markets were surfeited with very indifferent chickens from Russia, the throw-outs from last autumn's imports. There was not much change to report in the foreign egg trade from last week. The shipments for the week amounted to 476,263 great hundreds, as compared with 473,344 great hundreds during the corresponding period of 1909. There was a large falling-off in the imports of poultry, the figures for the week being £7,515, as against £14,307 for 1909. The English egg trade was good, demand being very brisk at moderate values.

### Week Ending June 11.

Good English poultry was in good demand; supplies were more plentiful, but did not equal the

demand. A few capons were sent to market, these realising from 4s. 6d. to 5s. 6d. Ducklings were inclined to be cheaper, especially for secondary qualities. Petits poussins realised from 1s. 2d. to 1s. 4d. each. The foreign egg trade was not good, the warm weather affecting the quality. The egg trade on the Liverpool market was very quiet at prices considerably lower than prevailed at the same period of 1909. The values of Irish eggs ruled low. Similar reports were to hand respecting the Manchester market. The shipments of foreign eggs for the week amounted to 444,527 great hundreds, as against 510,031 in 1909. The value of foreign poultry amounted to £3,639 for the week. The English egg trade maintained its firmness. The best qualities were up in value, but second quality remained unchanged.

## DECREASE OF POULTRY IMPORTS.

THE *Times*, in its issue of May 30 last, points out the fact of the decrease of the imports of poultry into this country, and says—"the high-water mark in this class of imports has been reached, and the tide is now receding." The significance (it goes on to say) of the present position lies in the fact that the best market for foreign poultry in this country is found during the first half of the year, and with five of the six months already run, the decrease has reached about 36 per cent., and that up to May 21 last poultry to the value of £329,406 had been received this year, whereas for the corresponding period of 1909 the value was £513,822. Later, it goes on to point out that foreign countries are consuming their own poultry produce to a greater extent. After careful consideration of the question raised, and making inquiries at sources which are likely to know, the opinion has been expressed that the imports of poultry from the United States of America are likely in the near future to cease, as they can realise better prices at home than they can in England, as not only is the cost of transit and storage heavy, but also values are rapidly advancing in that country. To prove that the supplies from America are falling off, we have only to turn to the Government returns for the past three years, and there we find that America in 1907 sent poultry to the value of £203,588. The figures for 1908 are £152,135, and for 1909 £149,552. In May of the present year, although she had a large stock of birds in cold storage, she had decided not to ship any more this season, as she could do better with them at home.

The imports from France tell the same story, although not in quite such a striking manner; however, during the past three years her imports have declined from £181,942 to £156,085.

The significance of these facts is that it is from France and America that we derive our best supplies of poultry, excepting, perhaps, Belgium, and with this shortening of supplies there must arise a greater demand for home-grown poultry.

It is a curious fact that alongside with the falling-off in our poultry imports there is a remarkable increase in the quantity of eggs we have received from abroad, but this increase is due almost



entirely to Russia, who has for the first five months of this year sent us nearly three times as many eggs as she did during the corresponding period of 1909.

## QUOTING PRICES OF ENGLISH POULTRY.

THE question has been asked whether it would not be possible to quote the value of English chickens at so much per pound, instead of by the bird. This is not possible, as it is the custom on the markets to sell English poultry by the piece—*i.e.*, at so much per bird. The reason why this system is adopted is that quality is the great dominating factor in determining values; weight counts only when quality is equal. For example, you might have two birds weighing 5lbs., and three 3lbs. each, and all be worth 3s. 6d. each, or the heavier birds worth only 2s. 6d., and *vice versa*. Again, English chickens are seldom or ever weighed when sold on the London markets, so it is not possible to obtain any records.

It is another matter altogether when dealing with foreign cold-stored poultry, especially in the case of the better quality birds. These are carefully graded into weights and qualities and packed in cases, each containing a certain number of birds. These are sold by the pound. In this case quality is the dominating factor of values, not weight.

## CLEAN EGGS VERSUS "GRUBBIES."

A VERY striking example of the importance of marketing eggs in a cleanly condition is to be found at the present time in the eggs we are receiving from Russia. Whilst those which are clean and bright are realising from 69s. to 78s. per great case (containing twelve long hundreds) those which contain any considerable quantity of dirty eggs (known to the trade as "grubbies") find, although of equal size and freshness, a very slow sale at from 50s. to 60s., representing approximately a loss of from 2d. to over 2½d. per dozen.

An egg marketed in a dirty condition will promptly be discarded by the trade as being unfit for best table purposes. However fresh an egg may be, if dirty, its freshness will be discounted. Neither size nor nationality will assist it. The trade will dub it a "grubbie." Who relishes the idea of a "grubbie" for breakfast! Even the old but rather opprobrious saying to the effect "That an egg and a nut can be eaten after a slut" fails to reconcile one to the idea. If you wish to capture the best class of egg trade, exclude all stained, dirty, and, of course, stale eggs from your consignments.

## THE HOME POULTRY TRADE.

ANOTHER fillip has been given to the poultry industry of this country by the opening of an all-British produce dépôt in the West-End of London on June 14. This has been taken in hand by Messrs. Abbot Brothers, the well-known poultry-farmers of Thuxton, Norfolk, and so far as we have been able to gather it promises to be a most successful concern, and one likely to benefit the farmer

and the small-holder in a most practical manner. The premises at 22, Panton Street, Haymarket, are fitted with every convenience for dealing adequately with a large business of this nature, and when once the concern is in full working order we predict a successful run for it.

## THE LAY OF THE ANCIENT EGG.

I AM the Egg.  
I was laid.

I'm the Hen that Laid the Egg.

I got a Place to Roost and Part of my Board.

I'm the Farmer who Owned

The Hen that Laid the Egg.

I got Twenty Cents a Dozen.

I'm the Man who Took the Egg to the Station

For the Farmer who Owned the Hen that Laid the Egg.

I got Two Cents a Dozen.

I'm the Express Company that Shipped the Egg

From the Man who Took the Egg to the Station

For the Farmer who Owned

The Hen that Laid the Egg.

I got Six Cents a Dozen.

I'm the Railroad that Carried the Egg

For the Express Company that Shipped the Egg

From the Man who Took the Egg to the Station

For the Farmer who Owned

The Hen that Laid the Egg.

I got Four Cents a Dozen.

I'm the Wholesaler who Cold-Stored the Egg

After the Railroad Carried the Egg

For the Express Company that Shipped the Egg

From the Man who Took the Egg to the Station

For the Farmer who Owned

The Hen that Laid the Egg.

I sold the Eggs for Forty Cents a Dozen.

I'm the Jobber who Passed Along the Egg

From the Wholesaler who Cold-Stored the Egg

After the Railroad Carried the Egg

For the Express Company that Shipped the Egg

From the Man who Took the Egg to the Station

For the Farmer who Owned

The Hen that Laid the Egg.

I sold the Eggs for Forty-eight Cents a Dozen.

I'm the Grocer who Sold the Egg

I got from the Jobber who Passed Along the Egg

From the Wholesaler who Cold-Stored the Egg

After the Railroad Carried the Egg

For the Express Company that Shipped the Egg

From the Man who Took the Egg to the Station

For the Farmer who Owned

The Hen that Laid the Egg.

I sold the Eggs for Sixty Cents a Dozen.

I'm the Poor Devil who Ate the Egg

My Wife Bought from the Grocer who Sold the Egg

He got from the Jobber who Passed Along the Egg

From the Wholesaler who Cold-Stored the Egg

After the Railroad Carried the Egg

For the Express Company that Shipped the Egg

From the Man who Took the Egg to the Station

For the Farmer who Owned

The Hen that Laid the Egg.

I got Ptomaine Poisoning.

--Life.



# TABLE OF PRICES REALISED FOR HOME, COLONIAL, AND FOREIGN POULTRY, GAME, AND EGGS FOR THE FOUR WEEKS ENDING JUNE 18, 1910.

## ENGLISH POULTRY—LONDON MARKETS.

DESCRIPTION.	PRICES REALISED DURING THE MONTH.			
	1st Week.	2nd Week.	3rd Week.	4th Week.
Surrey Chickens .....	3/6 to 5/6	3/0 to 5/0	3/0 to 5/0	3/0 to 5/0
Sussex " .....	3/6 " 5/6	3/0 " 5/0	3/0 " 5/0	3/0 " 5/0
Yorkshire " .....	3/0 " 4/0	2/6 " 4/0	2/3 " 4/0	2/3 " 4/0
Boston " .....	2/6 " 4/0	2/6 " 4/0	2/3 " 4/0	2/3 " 4/0
Essex " .....	2/6 " 4/0	2/6 " 4/0	2/3 " 4/0	2/3 " 4/0
Capons .....	—	—	—	—
Irish Chickens .....	2/3 " 3/6	2/6 " 3/6	2/0 " 3/6	2/0 " 3/6
Live Hens .....	2/0 " 2/9	2/0 " 2/6	2/0 " 2/9	1/6 " 2/6
Aylesbury Ducklings..	3/0 " 5/0	3/0 " 5/0	3/0 " 5/0	3/0 " 5/0
Ducks .....	—	—	—	—
Geese .....	—	—	—	—
Goslings, English ..	4/6 " 6/0	4/6 " 6/0	4/0 " 5/0	4/0 " 5/0
Spring Chicken, small	2/0 " 3/0	2/0 " 3/0	1/9 " 3/0	1/9 " 3/0

## ENGLISH GAME—LONDON MARKETS.

DESCRIPTION.	Each.	Each.	Each.	Each.
Grouse .....	—	—	—	—
Partridges .....	—	—	—	—
Pheasants .....	—	—	—	—
Black Game .....	—	—	—	—
Hares .....	—	—	—	—
Rabbits, Tame .....	1/2 to 2/0	1/2 to 2/0	1/0 to 2/0	1/0 to 2/0
" Wild .....	—	—	—	—
Pigeons, Tame .....	—	—	—	—
" Wild .....	—	—	—	—
Wild Duck .....	—	—	—	—
Woodcock .....	—	—	—	—
Snipe .....	—	—	—	—
Plover .....	—	—	—	—

## ENGLISH EGGS.

MARKETS.	Per 120.	Per 120.	Per 120.	Per 120.
LONDON .....	8/9 to 10/0	8/9 to 10/0	9/0 to 10/0	9/0 to 10/0
Provinces.	Eggs per 1/-	Eggs per 1/-	Eggs per 1/-	Eggs per 1/-
MANCHESTER ..	13 to 15	13 to 14	13 to 14	13 to 14
BRISTOL .....	0/9 " 0/10	0/10 " 0/11	0/10 " 0/11	0/10 " 0/11
	per doz.	per doz.	per doz.	per doz.

## FOREIGN POULTRY—LONDON MARKETS.

COUNTRIES OF ORIGIN.	PRICES REALISED DURING THE MONTH.			
	Chickens. Each.	Ducks. Each.	Ducklings. Each.	Geese. Per lb.
Russia .....	1/9 to 2/6	2/6 to 2/9	—	—
Belgium .....	—	—	—	—
France .....	—	—	—	—
United States of America .....	—	—	—	—
Austria .....	—	—	—	—
Canada .....	—	—	—	—
Australia .....	—	—	—	—

## IMPORTS OF POULTRY AND GAME. MONTH ENDED MAY 31, 1910.

FOREIGN GAME. LONDON MARKETS.	Price Each During Month.	COUNTRIES OF ORIGIN.		DECLARED VALUES.
		Russia	Poultry.	
Capercailzie .....	1/0 " 1/3	—	Game.	£1,357
Black Game .....	0/9 " 0/11	—	—	£8,933
Partridges .....	1/6 " 1/8	—	—	—
Quail .....	0/6 " 1/0	—	—	—
Bordeaux Pigeons .....	0/9 " 1/2	—	—	2,688
Hares .....	1/9 " 2/3	—	—	12,163
Rabbits .....	0/5 1/2 " 0/7 1/2	—	—	6,452
Snipe .....	—	—	—	—
Totals .....	—	—	—	£30,236

## IRISH EGGS.

DESCRIPTION.	1st Week.	2nd Week.	3rd Week.	4th Week.
	Per 120.	Per 120.	Per 120.	Per 120.
Irish Eggs	6/10 to 7/8	7/2 to 7/10	7/4 to 7/11	7/3 to 8/0

## FOREIGN EGGS.

DESCRIPTION.	1st Week.	2nd Week.	3rd Week.	4th Week.
	Per 120.	Per 120.	Per 120.	Per 120.
French ...	8/0 to 9/0	8/0 to 9/0	8/3 to 9/3	8/0 to 9/6
Danish ...	8/0 " 9/0	7/9 " 8/6	7/0 " 9/3	7/9 " 9/3
Italian ...	7/0 " 8/9	7/0 " 8/6	7/0 " 9/0	7/6 " 9/0
Austrian ...	5/3 " 6/9	5/3 " 6/9	5/5 " 6/9	5/6 " 7/0
Russian ...	4/9 " 6/0	4/9 " 6/6	4/9 " 7/0	5/3 " 6/9
Australian.	—	—	—	—
Canadian..	—	—	—	—

## IMPORTS OF EGGS. MONTH ENDED MAY 31, 1910.

COUNTRIES OF ORIGIN.	Quantities in Gt. Hund.	Declared Values.
Russia .....	1,027,574	£313,227
Denmark .....	256,984	101,618
Germany .....	6,073	2,211
France .....	143,201	62,300
Italy .....	59,160	23,700
Austria-Hungary	34,757	13,368
Australia .....	—	—
Other Countries	123,115	45,799
Totals .....	1,650,864	£562,223



## ANSWERS TO CORRESPONDENTS.

*The Editor will be glad to hear from readers on any Poultry Topics, and all Queries addressed to the paper will be answered if possible in the issue following their receipt. The desire is to help those who are in any difficulty regarding the management of their poultry, and accordingly no charge for answering such Queries is made. Unless stated otherwise, Queries are answered by*

F. W. PARTON,

*Lecturer in Aviculture, The University, Leeds.*

### Learning Poultry-Keeping.

I am anxious to take up poultry-farming with a view to making a living therefrom. I am at present a clerk, and having saved about £175, I should like to give up my present work and devote myself to an outdoor life. Can you tell me how much capital I must have to make a living, how long it would take me to learn the work, and what prospects I would have of making a good income? I am thirty-five, and very strong.—R. T. S. (Staines).

The question you ask is one of the most difficult to answer, and our advice would be not to change a certainty for an uncertainty without knowing the business and your own capacities. The sum you name is totally inadequate to pay for the cost of training, to equip a plant, and keep you during the building-up period. Before taking a step of this kind, obtain a copy of the POULTRY RECORD for May, 1909, and study carefully an article therein entitled "Poultry-Keeping as a Business," after which ask any further information you desire. We do not suggest that in the hands of a qualified man £175 would not be sufficient; but even in that case it would be necessary to obtain other work to afford means of living for two or three years. If you could do this, then you might spend £25 to £50 in learning the work, and afterwards take a situation and gradually develop the poultry plant until it is big enough to maintain you. In this way there would be no drain on your capital for living.—E. B.

### England v. the Colonies.

I intend giving up my present work and devoting my whole time to poultry. I am experienced, young, and strong. Can you inform me whether I am more likely to succeed in England or in one of the Colonies? I do not mind where I live so long as I can make a good living.—S. P. (Bolton).

Success depends more upon the man than the place, though naturally there must be a fair opportunity. For general questions, see reply to "R. T. S." in this issue. The advantages in the Colonies are (1) land is cheaper, and (2) men will do there what they will not at home. Pride has ruined many a promising enterprise.—E. B.

### Perches in the Open.

I have lately seen a poultry-farm with a number of perches in the open, and shall be glad to know if this is necessary, and why?—J. C. N. (Bagshot).

The provision of outside perches is so generally advantageous that it may almost be said to be necessary, and it certainly is so in some circumstances. You may satisfy yourself upon this point by careful observation of the habits of fowls, and you will no doubt remember having seen them perching on rails and farm-gates. The advantages on the score of health are obvious in wet weather when there is no adequate shed accommodation; and even in summer, when the early morning dew is heavy, fowls will readily avail themselves of such positions. After feeding in the early morning they like to use an outside perch, particularly if placed in the sun, and will stand and preen their feathers until the dew has been to a great extent evaporated.

### Dairy and Poultry Farming.

I am thinking of taking a farm in the South, keeping cows of a high milking capacity only (selling milk or butter), and rearing heifer calves. The fowls would be kept entirely for egg-production, rearing enough chickens to replace old stock. Do you think the combination a good one? Any advice will be gratefully received. I had an early experience of farming, but have been out of it lately. I have a living income, but want to increase it.—G. B. (Arkwright Street).

As you have had an early training, it does not appear that you will run much risk in adopting the course you suggest, particularly as you have a sufficient income to keep you going until you recover your latent knowledge and begin to receive some profit on your enterprise. If you are looking for a sufficient return on outlay, I should not advise you to take a farm of less than fifty acres, for which in the district you name you will have to pay a rent of about from 20s. to 30s. per acre. You will, of course, look for a place suitably placed with regard to railway facilities or nearness to a town. Do not overstock on any account; indeed, it is wise to go to the opposite extreme and increase when you find out the character of the holding.—J. W. H.

### Preserving Eggs.

Please tell me a good way to preserve eggs so that they will keep fresh for six months.—N. T. (Lewes).

There are several methods of preservation that can be relied upon to keep eggs in good condition for the length of time you mention, but probably the simplest way of "pickling" is by water-glass. The water-glass should be mixed with eight times its own bulk of water, and when thoroughly dissolved the eggs placed therein, leaving about an inch of water above the top layer of eggs. The eggs must be fresh and perfectly clean in shell before putting into the solution, and, if it can be arranged, infertile eggs used for the purpose.

### Green Food.

Is green food necessary for poultry, for although mine never have any they seem to thrive satisfactorily. If it is beneficial, in what form should it be given?—W. B. (Histon).

You do not state whether your fowls are at liberty or kept in confinement? Under both conditions green food is necessary; but when they have fields over which they may roam, a sufficient supply can usually be obtained. When in confined runs, and at a time of year when greens are young and tender, they should be given to the fowls raw. When, however, difficulty is found in procuring the vegetables fresh, such roots as turnips or mangolds may be boiled and mashed up with their soft food. Some form of green food should be supplied at every period of the year if fowls are to be kept in a healthy condition.

### Stock Ducklings.

Am I doing right in keeping my stock ducklings away from water? I understand that they thrive better when they do not swim.—W. R. (Farnley).

It is necessary for young ducklings that are intended to



be used ultimately for breeding purposes to have free access to water, otherwise their progeny will not have the same amount of stamina as those enjoying a swim. It is only ducklings that are to be used for marketing when in their "stub" feathers that should be kept away from water.

### Buying New Stock.

Which pays best when re-stocking a poultry-yard—buying stock-birds in the autumn, buying eggs and hatching them, or buying day-old chickens?—C. F. G. (Watford).

It is impossible to say which is the best way of re-stocking, as it depends entirely upon the time of year that you desire to start operations. If it is a matter of indifference, I would advise your commencing by buying birds in the autumn and hatching your own chickens in the early spring. Of the other two methods of re-stocking, I would recommend the purchase of day-old chickens as the better.

### Scaly Leg.

Will you please give me a good cure for scaly leg?—O. T. M. (Rochdale).

This is sometimes caused by fowls being kept upon dry soil, or on a run which is laid down in ashes, but more frequently it is due to the presence of parasites on the legs. If due to the first cause the birds should be removed to a grass run, the legs well soaked in warm water, and all loose scales taken off; when the legs are thoroughly dry, apply vaseline and zinc ointment. If the trouble is due to parasites, sulphur ointment may be applied. When the parasites are killed, the legs will assume their natural appearance.

### Guinea Fowls.

Can you tell me anything about Guinea fowls? I live on a farm of 300 acres, and have been advised to take them up, and I am told they are very profitable. Is this so, and are they very difficult to keep?—H. M. L. (Little Bealings).

These birds may be profitably reared, provided that they receive proper care and attention. The young ones are somewhat delicate, and cannot withstand damp to any extent, but when they get beyond the very early stages they can be depended upon to look after themselves, and be fed in the same way as other fowls on the farm. The demand for Guinea fowls for table purposes is limited, and the season is a very short one. The hens commence to lay about April, and will probably lay sixty to seventy eggs up to the end of August. The eggs are rather small but very rich in colour, and are considered quite a delicacy, and in certain fashionable districts command a good price. The greatest difficulty experienced in rearing Guinea fowls is their roving habits and propensity for laying away. They may, however, be brought under a better state of domestication by being kept with the other members of the poultry yard.

### Disinfecting Incubators.

I should be pleased if you would inform me how to disinfect incubators and foster-mothers.—J. de S. J. (Ponta Delgada).

The suggestion has been made that some, at least, of the troubles which arise in working incubators and foster-mothers originate from the presence of bacteria, developed under conditions which are favourable to their propagation. Such is indicated by the presence of moulds on the water-trays and cloths in the incubator. These can be destroyed if the former are washed with boiling water once or twice a week and clean cloths put in at the same time. Bacteria in the egg-chamber are more difficult to deal with, as they may find a lodgment in corners and interstices. Immediately hatching is completed, the egg-drawer and chamber should be carefully washed out with some good disinfectant together with regulator and other parts, and left open for a few hours before it is again filled. Such should be sufficient,

but further observations and experiments on this question are needed. So far as brooders are concerned, the danger of bacterial infection is even greater. The inside should, therefore, be washed out with equal care, and the sleeping compartment be lime-washed, mixing some disinfectant, such as petroleum, with the wash.—E. B.

### Short Replies.

R. M. (Dundee) : 1894.

E. A. B. (Salford) : 75 to 80.

T. W. S. (Maud) : Aylesbury ducklings.

W. S. (Kirkwall) : The artificial method.

E. M. T. R. (Cork) : The Buff Orpington.

## THE POULTRY CLUB.

THE monthly meeting of the Council was held on Friday, June 10, at 2 p.m., at the London Chamber of Commerce, Oxford Court, Cannon Street, London E.C., when there were present Mr. H. Wallis (in the chair), the Rev. T. W. Sturges, Dr. Hampton Brewer, Messrs. W. W. Broomhead, W. Bibby, W. Clarke, W. J. Golding, T. Threlford, W. M. Bell, T. F. Ramsey, W. A. Jukes, F. Bateman, T. Firth, J. Horn, F. J. S. Chatterton, W. Richardson, and G. Tyrwhitt-Drake (hon. secretary and treasurer).

NEW MEMBERS.—The following were duly elected : Recommended by Yorkshire Branch—L. M. Batty, Treeton, near Rotherham. Recommended by Surrey Branch—E. Stevens, New Inn, Chiddingfold, Surrey. Recommended by Aberdeenshire Branch—A. E. Hall, Cranfield House, Southwell, Aberdeen. Recommended by North Wales Branch—Watkin Samuel, King's Mill House, Wrexham ; J. L. Williams, 13, Maengwyn Street, Towyn, Merioneth.

AFFILIATION.—The following societies were duly associated : Recommended by Cheshire Branch—Cheshire Agricultural Society, Secretary, T. A. Beckett, 81, Werburgh Chambers, Chester. Recommended by North Wales Branch—Machynlleth Horse, Cattle, Dog, Poultry, and Horticultural Show, Secretary, John Pugh, Auctioneer, Machynlleth. Recommended by Essex Branch—Had eigh and District Fanciers' Society, Hon. Secretary, F. W. Monk, Hadleigh, Essex. Recommended by Middlesex Branch—Wembley Fanciers' Association, Hon. Secretary, J. Lindsay Deas, Selhurst, London Road, Wembley, Middlesex.

SPECIALS GRANTED.—The following shows were announced to be held under club rules, and specials were accordingly allotted : Whitchurch, Royal Northern, Lunsdale, Mid-Cheshire Farmers' Association.

ALTERATION OF SHOW RULE No. 3.—The following resolution was sent up by the Yorks branch committee *re* the alteration of Show Rule 3 : "That the opinion expressed in the resolution passed at the last meeting of this committee that the extraordinary general meeting to be held at Birmingham would fail to secure a representative gathering having proved correct, and the resolution passed at the annual general meeting held at the last Dairy Show having been rescinded, this committee reiterates its strong opinion as to the advisability of retaining such original resolution, and requests the Council to bring the matter before the next annual general meeting." The hon. secretary was instructed to write to the Yorks branch secretary, informing him that the resolution would be placed on the agenda for the next general meeting.

The next meeting of the Council will be held at the London Chamber of Commerce on Friday, July 8. Names of prospective members and affiliated societies, with subscriptions (which must be paid in advance), must reach the hon. secretary on or before July 1, or, if the would-be member reside in a county having a county branch, through the secretary of that branch.

FREDERICK J. BROOMHEAD.

Vice-President.

G. TYRWHITT-DRAKE.

Hon. Sec. and Hon. Treasurer.



## NATIONAL POULTRY ORGANISATION SOCIETY, LIMITED.

THE monthly meeting of the Central Executive Committee of the above Society was held at 20, Arlington Street, S.W., on June 10.

PRESENT.—The Marchioness of Salisbury (president) in the chair. Members of Committee: Colonel Victor Van de Weyer, Mr. B. W. Horne, and Colonel R. Williams, M.P. (treasurer). Officials: Mr. Edward Brown, F.L.S. (honorary secretary), Mr. Verney Carter (organising secretary), and Mr. F. A. Hazlewood (assistant secretary). Apologies for non-attendance were received from Mr. R. Armitage, M.P., Mr. C. E. Brooke, Mr. Cary Coles, and Mr. W. Fitzherbert-Brockholes, J.P., D.L.

MINUTES.—The minutes of the previous meeting, held May 6, were read and signed as correct.

NEW DEPOTS.—The following nine applications for association with the N.P.O.S. were approved and share certificate signed accordingly: Broadwell and District Egg Collecting Dépôt, Limited, Warwick; Chipping Norton and District Egg Collecting Dépôt, Limited, Oxon; Ellesmere Traders, Limited, Salop; Llanybyther Agricultural Co-operative Society, Limited, Cardigan; Pen-Selwood Burton and District Collecting Dépôt, Limited, Somerset; Renhold and District Poultry Dépôt, Limited, Beds; Rickmansworth and District Egg Dépôt, Limited, Herts; Ropley, Medstead and District Egg and Poultry Society, Limited, Hants; and Tatsfield Egg and Poultry Society, Limited, Surrey.

REPORTS OF BRANCHES AND DEPOTS.—The organising secretary reported the result of his visit to the Minsterley and District Egg and Poultry Dépôt, Limited, and stated that the prospects and situation of the dépôt were excellent, and that the local farmers were very enthusiastic.

LEAFLETS IN WELSH.—A letter was submitted from the Board of Agriculture expressing their intention to act on the suggestion made by the N.P.O.S., and in future to issue their Poultry Leaflets in Welsh, with which letter the committee expressed great satisfaction.

NEW MEMBERS.—Two members of council were elected and four members, as follows: Members of Council—W. H. Cullen, Micklem, Downs, near Dorking; Herbert S. Leon, Bletchley Park, Bucks. Members—Mr. Trevor Corbett, Raddimore, Dorrington, Salop; Mr. C. B. Goody, Walton, Brookfield, Teignmouth; Mr. George Houston, Little Aston, Sutton Coldfield; Mr. Stanton Roe, The Chestnuts, Halesworth, Suffolk.

EDWARD BROWN,  
Honorary Secretary.

June 13, 1910.

## THE UTILITY POULTRY CLUB COMMITTEE.

MEMBERSHIP.—Thirteen persons were elected members of the club.

PRIZE AND SPECIALS.—The following special prizes were granted: Wragby Horticultural and Cottage Garden Exhibition, 10s.—eggs; Holbeach Fruit and Flower Show, £1—breeding-pen table poultry.

POULTRY INSTITUTE.—Messrs. B. W. Horne and C. E. J. Walkey were appointed as representatives to the committee being formed to further the project.

TWELVE MONTHS' LAYING COMPETITION.—The hon. secretary reported that four colleges were considering the proposal to hold the competition, but even if the conditions were favourable, the question of finance raised serious difficulties, and it was feared would prevent any satisfactory arrangement being arrived at.

FOUR MONTHS' LAYING COMPETITIONS.—It was agreed to invite tenders for holding Northern and Southern Competitions on the same lines as last year.

FINANCIAL.—The hon. treasurer presented a statement of receipts and expenditure for the period October, 1909—April, 1910, showing a balance in hand of £151 11s. 2d. He reported that the receipts during the remainder of the financial year were not expected to amount to much, while considerable expense would be incurred in connection with typewriting, postages, stationery, printing, prizes and specials, and the secretary's honorarium. It was agreed that the railway fares paid by the club's representatives in connection with their attendance in London at the meetings in relation to the Fox-Hunting and Poultry Institute matters be repaid out of the club's funds.

REGISTER OF TABLE POULTRY AND EGGS.—Mr. C. E. J. Walkey reported that he had obtained the consent of the Somerset County Council to the publication and distribution of a leaflet on the subject.

L. W. H. LAMAISSON,  
Merstham, Surrey. Hon. Secretary.

## THE WHITE WYANDOTTE CLUB.

INTENDING new members are reminded that if they join on or after July 1 next they obtain fifteen months' membership for one subscription of 5s. Copies of the Year-Book have been applied for and sent to British Columbia, India, South Africa, Burma, and Ceylon. As the hon. secretary has still a stock of 1910 Year-Books on hand, he is willing to send a copy to applicants who enclose two penny stamps.

Many specials have been granted to forthcoming shows, including the Dairy, Tunbridge Wells, Bingley, Altrincham, Lancaster, Hayward's Heath, &c., whilst a gold medal is being exchanged with the Winnipeg Industrial Exhibition. All persons in any way interested in White Wyandottes are requested to take this opportunity of joining the club, which caters well for the variety.

J. STEPHEN HICKS,  
Hon. Secretary and Treasurer.

## REVIEWS.

### A BREEDER-SALESMAN'S OPINIONS.\*

MR. C. E. BROOKE, Past Master of the Poulterers' Company, is well known for his efforts to advance the production of table-poultry. As well as being one of the leading salesmen in London, he has considerable experience as a breeder. His little book just published, "Poultry-Keeping for Pleasure and Profit,"\* is certain, therefore, to command attention. Perhaps its structure as a book and its literary qualities are not of the highest, but it embodies a large amount of practical knowledge. Mr. Brooke calls attention to the preferential rates on carriage of foreign poultry, and says that poultry and game have to bear charges of £5 per ton from Scotland and £4 to £5 10s. from Ireland, whilst the total expenses from Russia are £1 10s. per ton. The main value of the book will be found in the chapters on table-poultry, in which direction Mr. Brooke can speak with authority, and on preparation for market. One point, however, may be mentioned as deserving explanation. The Indian Game and Dorking cross is strongly advocated, and rightly so for autumn and winter birds, but for spring chickens these do not equal other crosses, as the birds are slow in growth. In further editions it would be well if mention were made of more rapid maturing crosses in view of the spring and summer demand.

\* "Poultry-Breeding for Pleasure and Profit," by C. E. Brooke. London: Simpkins, 128 pp., paper boards, 1s.